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ABSTRACT

This volume of appendices is Part II of a study of program implementation in 12 models of Head Start Planned Variation. It presents details of the data analysis, copies of data collection instruments, and additional analyses and statistics. The appendices are: (A) Analysis of Variance Designs, (B) Copies of Instruments, (C) Additional Analyses, (D) Means and Standard Deviations, (E) Factor Analysis of the Consultant Site Assessment, (F) List of Fifty-one Classroom Observation Variables, and (G) Means and Standard Deviations for Classroom Observation Variables. (SET)

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IMPLEMENTATION OF HEAD START PLANNED

VARIATION: 1970-1971

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Part II

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Cambridge, Massachusetts

PS 006850

IMPLEMENTATION OF HEAD START PLANNED VARIATION: 1970-71

PART II

APPENDICES

- A. Analysis of Variance Designs
- B. Copies of Instruments
- C. Additional Analyses
- D. Means and Standard Deviations
- E. Factor Analysis of the Consultant Site Assessment
- F. List of Fifty-one Classroom Observation Variables
- G. Means and Standard Deviations for Classroom Observation Variables

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Appendix A

Analysis of Variance Designs

Because the data presented in this report are taken from different sources, not all analyses of variance have the same data base. This appendix specifies which sites and models are included in the different analyses (Tables A-1, A-2 and A-3) and outlines the reasons for inclusion.¹

One criterion for determining which sites are included in an analysis is the availability of data. Obviously, if the data for a site are missing, the site cannot be included. For most of the analyses, a second criterion for determining which sites are included is the need for a balanced design. A balanced design, meaning an equal number of sites in each model, is desirable because it results in unbiased F-tests of effects. Since the design was not balanced *a priori*, it must be done after the fact by excluding sites from the analysis. This means, first, that models within only one site must be eliminated. Therefore, REC, Pittsburgh, and NYU are not included in any of the balanced analyses of variance. For the other models, level I sites are excluded first if fewer sites are needed for a balanced design, where

¹ These tables only show designs for analysis of variance. The regression analyses, correlations, and basic statistics (see Appendix D) include all data available. From Tables A-1 and A-2, sites for which there are data are indicated by either an X or an O.

TABLE A-1

Models and Sites to be Included in Implementation Analyses of:

Model	Site	Sponsor Ratings	Teacher and Aide Questionnaires		
			PV Only*	PV-NPV	Compar.
Far West	Buffalo	I 0	0		
	Duluth	III 0	0		X
	Fresno	III X	X		
	Salt Lake	I X	X		
	Tacoma	II 0	0		
Arizona	LaFayette	III	0		X
	Lakewood	I	0		
	Lincoln	III	0		
Bank Street	Boulder	III 0	0		X
	Tuskegee	I X	X		
	Wilmington	II 0	0		0
	Elmira	III 0	0		0
Oregon	E. St. Louis	III 0	0		0
	Tupelo	III 0	0		0
	E. Las. Vegas	III 0	0		X
Kansas	Oraibi	III	0		
	Portageville	III	0		0
	Mounds	II	0		0
High Scope	Ft. Walton B.	III 0	0		0
	Central Ozarks	I X	X		
	Greeley	III 0	0		0
	Seattle	II 0	0		
Florida	Jacksonville	I	X		
	Jonesboro	III 0	0		0
	Chattanooga	III 0	0		0
	Houston	II 0	0		X
EDC	Washington	III	0		0
	Paterson	II	0		X
	Johnston Co.	III	0		0
Pittsburgh	Lock Haven	III X	X		X
REC	Kansas City	III X	X		
N.Y.U.	St. Thomas	III X	X		X
Enablers	Billings	II 0	0		
	Colorado Sp.	II 0	0		
	Bellows Falls	II 0	0		
	Newburgh	I X	X		
	Puerto Rico	I X	X		
# of Models Included		6	9		6
# of Sites Included		18	27		12

*The models and sites in this column will be referred to as the "standard design."

0: site included in the analysis

X: site with data, but not included in the analysis
blank: no data

I, II, III: levels of testing of children; level III sites have the most extensive testing and level I, the least sites.

TABLE A-2

Models and Sites to be Included in Implementation Analyses of:

Model	Site	Consultant Report	Sponsor Implement. Report	Classroom observations
Far West	Buffalo	I	0	0
	Duluth	III	0	0
	Fresno	III	0	0
	Salt Lake	I	0	0
	Tacoma	II	0	0
Arizona	Lafayette	III	0	0
	Lakewood	I	0	0
	Lincoln	III	0	0
Bank Street	Boulder	III	0	0
	Tuskegee	I	0	0
	Wilmington	II	0	0
	Elmira	III	0	0
Oregon	E. St. Louis	III	0	0
	Tupelo	III	0	0
	E. Las Vegas	II	0	0
Kansas	Oraibi	III	0	0
	Portageville	III	0	0
	Mounds	II	0	0
High Scope	Et. Walton-B.	III	0	0
	Central Ozarks	I	0	0
	Greeley	III	0	0
	Seattle	II	0	0
Florida	Jacksonville	I	0	0
	Jonesboro	III	0	0
	Chattanooga	III	0	0
	Houston	II	0	0
EDC	Washington	III	0	0
	Paterson	II	0	0
	Johnston Co.	III	0	0
Pittsburgh	Lock Haven	III	X	X
REC	Kansas City	III	X	X
N.Y.U.	St. Thomas	III	X	X
Enablers	Billings	II	0	0
	Colorado Sp.	II	0	0
	Bellows Falls	II	0	0
	Newburgh	I	0	0
	Puerto Rico	I	0	0
# of Models		9	15	11
# of Sites		31	17	25

0: site included in the analysis

X: site with data, but not included in the analysis

blank: no data

I, II, III: levels of testing of children; level III sites have the most extensive testing and level I, the least sites

* The Enablers were not asked to complete a Sponsor Implementation Report.

TABLE A-3

Models and Sites to be Included in Implementation Analyses of:

Model	Site	Sponsor ratings		Conditional	
		'Yr.1vYr.2	'Yr.1vYr.2	Sites*	teachers*
Far West	Buffalo	I			0
	Duluth	III	0	0	0
	Fresno	III			
	Salt Lake	I			X
Arizona	Tacoma	II	0		0
	Lafayette	III			X
	Lakewood	I			
	Lincoln	III			X
Bank Street	Boulder	III	0		0
	Tuskegee	I	0	0	
	Wilmington	II	0	0	0
	Elmira	III	0		0
Oregon	E: St. Louis	III	0	0	0
	Tupelo	III	0	0	0
	E. Las Vegas	II	0		0
Kansas	Oraibi	III			0
	Portageville	III			0
	Mounds	II			0
High Scope	Ft. Walton B.	IV	0	0	0
	Central Ozarks	I	0	0	
	Greeley	III	0		0
	Seattle	II	0		0
Florida	Jacksonville	I			
	Jonesboro	III	0		0
	Chattanooga	III	0	0	0
	Houston	II	0		0
EDC	Washington	III			0
	Paterson	II			0
	Johnston Co.	III			0
Pittsburgh	Lock Haven	III			X
REC	Kansas City	III			X
N.Y.U.	St. Thomas	III			X
Enablers	Billings	II			
	Colorado Sp.	II			
	Bellows Falls	II			X
	Newburgh	I			
	Puerto Rico	I			X
# of Models Included		--	--	--	7
# of Sites Included		16	8	21	

*Only sites which are included in the analysis are shown; sites for which there is data, but which are not included are not specified

0: site included in the analysis

X: site with data, but not included in the analysis

blank: no data

level I indicates the sites which receive the least amount of testing on the children.¹ When a level I site is not available, a site is eliminated at random. The exception to this criterion is Fresno, which is a level III site but is eliminated from all analyses of variance because the site had many problems and because the data was poor.

Table A-1 shows the designs for three of the major analysis sets in the report. Each meets both criteria set out above. The design for the sponsor ratings includes six models with three sites apiece. In the Teacher and Aide Questionnaire analysis, there are 9 models with 3 sites for PV only and 6 models with 2 sites for the PV-NPV comparisons.

For the designs in Table A-2, the requirement of a balanced design does not hold. Unequal numbers of sites within models are acceptable in the analyses of the consultant and sponsor reports because there is only one observation per site and the site is the basic unit of analysis. Sites with only one site per model are still excluded from the analyses of two sets of data because there is no variation within these models: they are represented by a single data point. Meeting the criteria, then, of excluding sites with missing data and with only one site per model, results in a design of 9 models and 31 sites for the consultant reports.

¹ See "Some Short Term Effects of Project Head Start: A Preliminary Report on the Second Year of Planned Variation -- 1970-71" for a more detailed discussion of levels of testing.

and a design of 5 models and 17 sites for the sponsor reports.

A balanced design is not used for the Classroom Observation analyses because they are based on an exact least squares solution for unbalanced design (rather than the approximate unweighted means analysis used for the other analyses) which includes all data. Chattanooga, E., St. Louis and St. Thomas are excluded because they have fall but no spring data.

Table A-3 shows the designs three for special analyses. The first two analyses are based on the sponsors' ratings of teachers at February and May and are therefore first restricted by the data available for that measure. For the year 1 v. year 2 site analysis (the number years the site had participated in PV), the second requirement is that a model have both first and second year sites. This eliminates Pittsburgh, REC, NYU, and the Enablers, all of which have been in the study for only one year. In the remaining data, there are not enough cases to create a balanced design within models with at least two sites for each year (one models per year is not acceptable because the effects of year of participation are confounded with site effects). As a result, the models factor is eliminated from the design, and the analysis is performed with a balanced number of first and second year sites. A balanced design, again, is reached by eliminating level I sites first. For the year 1 v. year 2 teachers analysis (the number of years which individual teachers had participated in PV), the second requirement is

that only second year sites be included. In first year sites, there can be no teachers who have participated in PV for more than one year, and consequently there can be no variation on the dimension to be tested. The two requirements, data for sponsor ratings and only second year sites, then, reduces the number of sites available for this analysis to 8. To allow for the inclusion of all remaining sites, models are excluded from this analysis also. Finally, Table A-3 shows the sites which are included in the conditional analysis of pre-service training. This design is like the standard design in Table A-1 except that the Arizona and Enabler models were excluded because both had entire sites which reported no pre-service training, and therefore unbalanced the design.

Appendix B

The following instruments are included in this appendix.

The abbreviation after the title indicates the abbreviation for that instrument used throughout the report.

1. Teacher Rating by Sponsors
2. Teacher Questionnaire (TQ)
3. Teacher Aide/Assistant Questionnaire (AQ)
4. Sponsor Implementation Report (SI)
5. Site Assessment from the Final Consultant Report (CR)
6. Classroom Observation Procedure (CO)



Teacher Ratings by Sponsors

We need your judgment as to how well the teachers of the classes that were tested in the Planned Variation evaluation perform in your model. The table on the reverse side contains the names of the teachers for whom we need ratings and the centers or schools in which they teach. Please rate each of them for three time periods, using the codes shown:

O = Teacher's performance as of October 1, 1970

F = Teacher's performance as of February 1, 1971

M = Your prediction of how well the teacher will be doing by the end of May 1971

For each of the teachers there should be three entries made on the line (use letters O, F, and M) to show how acceptable you judge her to be in implementing your model. You may write the letters over one another, i.e. O or O, to show that you rate her the same for two or even three time periods. If a teacher has been replaced please add her name and rate her for the appropriate time period(s).

WHEN YOU ARE FINISHED: Return the completed form in the accompanying envelope. If at all possible we would like to have the ratings completed by February 15, 1971, and returned promptly to:

Tor Meeland
Head Start Planned Variation Evaluation
Stanford Research Institute
Menlo Park, California 94025

8071

1/71

Sponsor _____

Community _____

CODE: O = Teacher's performance as of October 1, 1970
F = Teacher's performance as of February 1, 1971
X = Your prediction of how well the teacher will
be doing by the end of May 1971.

Center/School	Teacher	Not Acceptable	Teacher Performance*							0	1	2	3	4	5	6	7	8	9
			Barely Acceptable	Average	Outstanding	0	1	2	3	4	5	6	7	8	9				
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
			0	1	2	3	4	5	6	7	8	9							

Please read the instructions on the other side of this sheet.



Spring 1971

Teacher Ratings by Sponsors

Again your judgments are needed as to how well the teachers of the classes that were tested in the Planned Variation evaluation perform in your model. The table on the reverse side contains the names of the teachers for whom ratings are needed and the centers or schools in which they teach. Please rate each of them for two time periods, using the codes shown:

M = Teacher's performance as of May 1971

P = Your prediction of how well the teacher
will do next year

For each of the teachers there should be two entries made on the line (use letters M and P) to show how acceptable you judge her to be as a Head Start teacher. You may write the letters over one another, i.e. M or P, to show that you rate her the same for the two time periods.

If a teacher has been replaced please add her name and rate her for the appropriate time period(s).

For any teacher you rate 8 or 9, please indicate briefly (at the bottom of the form) your reason(s) for the high rating.

WHEN YOU ARE FINISHED: Return the completed form in the accompanying envelope. If at all possible we would like to have the ratings completed by June 15, 1971, and returned promptly to:

Tor Meeland
Head Start Planned Variation Evaluation
Stanford Research Institute
Menlo Park, California 94025

Sponsor _____ Community _____

CODE: M = Teacher's performance as of May 1970

P. = Your prediction of how well the teacher will do next year.

Give brief explanation for the 3 and 9 ratings (use other side if more space is needed).



TEACHER QUESTIONNAIRE

Your Name _____

School _____
HS/Center _____

Community/City _____, _____ state _____

Date this questionnaire was completed _____
month _____ day _____ year _____

I N S T R U C T I O N S

Last fall Stanford Research Institute collected information about the children in your class as part of the Head Start Planned Variation Evaluation. Similar information will be gathered this spring (April - May, 1971).

This questionnaire is being presented to each teacher whose class is part of the evaluation, either as a Planned Variation program or a comparison class. We greatly appreciate the effort you make in answering the questions. To help keep your responses confidential we have provided a pre-addressed, stamped envelope for direct mailing to:

To: Meegland
Head Start Planned Variation Evaluation
Stanford Research Institute
Menlo Park, California 94025

If you have any questions regarding procedures or if some of the instructions are not clear, please contact the SRI Site Coordinator who distributed this form to you or call us directly by placing a collect call to SRI, (415) 326-6200 and ask for Mary Anastole (Extension 3568) or Sandra Murphy (Extension 3503).

Stanford Research Institute

Menlo Park, California

1971

Some Head Start teachers are part of the Planned Variation Program in Head Start and have received training and materials by one of eleven national sponsors of these programs. As each sponsor conducts his own program (or model), the educational progress of the children is followed closely. Other classroom teachers have been selected as comparison teachers and they carry out programs consistent with national Head Start goals.

This questionnaire was designed to obtain information about both the sponsored Planned Variation teachers and the Head Start comparison teachers.

I. General Information

1. What is the name of the Head Start Planned Variation sponsor in your community? _____
 Don't know
2. Have you attended meetings when this sponsor's model was presented?

yes

no
3. Have you discussed the Planned Variation model with other teachers?

yes

no

II. Pre-service Training

4. Did you receive pre-service (summer) training?

yes

no

(if no, go on to question 8)

5. How long was the pre-service training period?

Number of days: _____ Hours per day: _____

6. What kind of pre-service (summer) training have you received and by whom? (Check as many as apply.)

	<u>Sponsor Representative</u>	<u>Consultant</u>	<u>Local HS Office</u>	<u>Other</u>
Demonstration lessons	_____	_____	_____	_____
Lectures	_____	_____	_____	_____
Individual meetings with leader	_____	_____	_____	_____
Group discussions	_____	_____	_____	_____
Discussion of videotaped lessons	_____	_____	_____	_____
Observations	_____	_____	_____	_____
Role playing	_____	_____	_____	_____
Other _____ please specify	_____	_____	_____	_____

7. Check the areas of training you received in pre-service.

Please rank those received in order of usefulness
(1=most useful, 2=less useful, etc.)

- techniques in working with children _____
- use of materials _____
- organization & management of classroom _____
- other (please specify)

III. In-Service Training

8. As you were teaching during the year, was help and/or in-service training available to you?

yes

no

(if no, go on to question 11)

If yes, how often? daily every other month
Once a week twice this school
twice a month year
monthly once this year

9. What kind of in-service training have you received and by whom?

	<u>Sponsor Representative</u>	<u>Consultant</u>	<u>Local HS Office</u>	<u>Other</u>
Demonstration lessons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lectures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Individual meetings with leader	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Group discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discussion of videotaped lessons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Observations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Role playing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/> please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Check the areas of training received in in-service.

Please rank those received in order of usefulness (1=most useful, *2=less useful, etc.)

techniques in working with children

use of materials

organization & management of classroom

other (please specify)

11. During the past year have you personally requested help and/or training?

yes If yes,

a. How many times did you request help and/or training?
(Circle number of times) 1 2 3 4 5 6 7 8 9 10 or more

b. How many of these times did you receive help and/or training?
(Circle number of times) 1 2 3 4 5 6 7 8 9 10 or more

12. To whom do you go for help and information in implementing the program? (You may check more than one)

Sponsor Representative _____

Head Start Director
or Assistant _____

Another teacher _____

Other (please specify) _____

Please circle the one
you go to most often.

No one available _____

13. Did those who trained you stay long enough to be really helpful to you?

yes

no

14. Have your feelings about Head Start changed because of this training?

yes

no

If yes, in what way? _____

If no, please comment: _____

15. If you had your choice, what kind of training or help do you wish you could have had in your Head Start teaching?

16. In general, how satisfied are you with the training offered you during the year?

very satisfied

quite satisfied

somewhat satisfied

somewhat dissatisfied

very dissatisfied

17. What suggestions do you have for improving the training? _____

IV. Educational Goals

- 18a. How do you rate the following experiences for the children you teach?

Please read all of the following items and choose the 3 goals you consider to be "most important". Write the numbers for these goals in the 3 spaces in the "Most Important" column below. List the numbers of the other items in the columns of your choice. The 3 goals you enter as "Least Important" are relative to the rest; they can still be experiences you feel the children should have.

Goal Number

1. Enjoying stories
 2. Learning to read
 3. Developing phonic skills
 4. Planning own activities
 5. Acquiring time-space concepts
 6. Feeling comfortable in a new situation
 7. Following directions
 8. Relying on verbal communication more than gesture
 9. Working and playing cooperatively
 10. Recognizing similarities and differences in objects
 11. Developing math concepts
 12. Feeling important as a person
 13. Learning to make choices when offered a variety of alternatives
 14. Exploring the environment
 15. Freedom to express self through art
 16. Feeling competent about academic skills
 17. Sharing ideas
 18. Having the freedom to express own feelings
 19. Developing respect for self and others
 20. Thinking logically

MOST IMPORTANT	MORE IMPORTANT	IMPORTANT	LESS IMPORTANT	LEAST IMPORTANT
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

- 18b. Realizing that many of the above goals are important, which one stands out in your mind as being most necessary to a developing child?

19. What are some of the techniques you use when pupils have difficulty with the following? Please give examples. If you do not think of these behaviors as desirable for your class, please so state.

a. Persistence in solving problems.

b. Working with other children.

c. Working with adults.

d. Working alone.

e. Identifying positively with his cultural group.

f. Confidence in entering new situations or attempting new skills.

g. Willingness in taking part in decision making for classroom activities.

V. Professional Expectations

20. Do you think you are using the service of your aide(s) more effectively now than you did at the beginning of the year?

yes

no

If yes, in what way? _____

21. Do you use volunteers in your classroom?

yes

no

If yes, in what way? _____

22. Do you think a better feeling between you and your co-workers could be achieved?

yes

no

If yes, in what way? _____

23. Rank the following in order of importance: (1=most important, 2=next most important, etc.)

As a teacher with a busy schedule, do you wish you had:

More time to do necessary paper work

More time to be with individual children or small groups

Some time to yourself away from lesson planning and training staff

More time to work with volunteers and aides

More time to work with parents

More time to prepare materials

More time to work with aide

Other (specify)

None of the above--am satisfied with present schedule

24. How do you feel about the working conditions in your classroom?

	Very Satisfied	Satisfied	Have Mixed Feelings	Dissatisfied	Very Dissatisfied
1. Equipment	_____	_____	_____	_____	_____
2. Supplies	_____	_____	_____	_____	_____
3. Classroom Space	_____	_____	_____	_____	_____
4. Class Schedule	_____	_____	_____	_____	_____
5. Salary	_____	_____	_____	_____	_____
6. Planning Time	_____	_____	_____	_____	_____

25. Assume you have the opportunity to change your program for next year. Read all of the following items and choose the two you consider to be "Most Important". Write the numbers for these goals in the two spaces in the "Most Important" column below. List the number of the other items in the appropriate columns.

1. more teaching materials
2. more training for myself
3. more training for aides
4. better physical facilities
5. less paper work
6. more time to teach
7. more aides
8. more volunteers
9. better psychological services
10. better medical services
11. better dental services
12. better food services
13. more parent involvement
14. less testing
15. more recognition from the community

MOST IMPORTANT	MORE IMPORTANT	IMPORTANT	LESS. IMPORTANT	LEAST IMPORTANT
-------------------	-------------------	-----------	--------------------	--------------------

VI. Home Visits - Parent Participation/Information

26. Have any home visits been made this year?

yes

no

27. If yes, who made these visits and approximately how many visits did they make?

Number of Visits

teacher _____

aide _____

volunteer _____

other Head Start staff _____

28. How do your parents generally feel about home visits?

welcoming and ask you back

friendly

moderately accepting

unfriendly

won't let you in

29. How many parents are involved in your Head Start class (more than picking up children from school)? Please circle the numbers that apply.

Number of Parents:

every day 1 2 3 4 5 6 7 8 9 10 or more

once a week 1 2 3 4 5 6 7 8 9 10 or more

once a month 1 2 3 4 5 6 7 8 9 10 or more

rarely 1 2 3 4 5 6 7 8 9 10 or more

never 1 2 3 4 5 6 7 8 9 10 or more

30. How often were the following offered for the parents of the children in your class?

	weekly	monthly	twice this school year	once this school year	never
Parent Parties	_____	_____	_____	_____	_____
Parent Programs in Childhood Education	_____	_____	_____	_____	_____
Parent-Teacher Meetings	_____	_____	_____	_____	_____
Parent Work Day	_____	_____	_____	_____	_____
Other (please specify)	_____	_____	_____	_____	_____

31. How many of your class parents have changed careers or career plans during the past year? (please check one)

____ 1-2 parents
____ 3-8 parents
____ 9-15 parents
____ 16 or more
____ don't know

32. How many of your parents have gone back to school during the past year? (Please specify)

	Number of Parents:										
High School	1	2	3	4	5	6	7	8	9	10	or more
Trade School	1	2	3	4	5	6	7	8	9	10	or more
College	1	2	3	4	5	6	7	8	9	10	or more
English Language Classes	1	2	3	4	5	6	7	8	9	10	or more
Other (please specify)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

VII. Background and Teaching Experience

33. Do you now live in the neighborhood where most of the children in your class live:

yes

no

If yes, about how long have you lived in this neighborhood?

34. Are you:

Male

Female

35. Are you:

Single Divorced

Married Widowed

Separated

36. How old were you on your last birthday?

years

37. Do you have any children?

no

yes. Are they or have they ever been in Head Start?

no

yes

38. Please check your ethnic group:

Caucasian			Negro/ Black	American Indian	Oriental	Other Non- Caucasian (specify)
Mexican- American	Puerto Rican	Other				

39. Please circle the highest grade you have completed.

Grade School	High School	College	Post Graduate
1 2 3 4 5 6 7 8	9 10 11 12	13 14 15 16	17 18 19 +

40. Please check any of the following you have had:

An adult education course in early childhood development.

Nursery School teaching course

Nursery School practice teaching

Course work in kindergarten, first or second grade

Kindergarten, First, or Second Grade practice teaching

41. Do you have a state or city teaching certificate?

yes

no

If yes, what type?

Temporary (provisional or emergency)

Regular

Other: _____
(please specify)

42. As of June 1971, how many years of full-time paid teaching experience will you have had in each of the following?

years in Head Start

years in other pre-school

years in Kindergarten

years in First Grade

years in Second through Fourth Grade

years in Fifth Grade or higher

43. How did you happen to teach in this center rather than another?

44. Do you plan to teach in either Head Start or Follow Through next fall?

- Yes, Head Start

45. Are you a teacher in Planned Variation?

- no

yes; did you choose to participate in Planned Variation?

no

yes

46. Would you choose to be in Planned Variation next year?

- no
yes
can't say, don't know the program of Planned Variation.

47. Please make any comments or suggestions that you feel might be helpful to us in the evaluation of Head Start.

48. Based on many teachers' comments from last year and the analyses of the teacher information of last year, we have tried to modify this questionnaire to include only items that have specific application to the data analyses in the PV evaluation. If there are some items you feel should be omitted or changed for next year, we would appreciate your identifying them by number or topic.



TEACHER AIDE/ASSISTANT QUESTIONNAIRE

YOUR NAME: _____
Miss _____
Mrs. _____
Mr. _____

TEACHER'S NAME: _____
Miss _____
Mrs. _____
Mr. _____

SCHOOL NAME: _____

CITY, STATE: _____, _____

Date this questionnaire was completed _____
(Month) _____ (Day) _____ (Year) _____

I N S T R U C T I O N S

Last fall Stanford Research Institute collected information about the children in your class as part of the Head Start Planned Variation Evaluation. Similar information will be gathered this spring (April-May, 1971).

This questionnaire is being presented to each teacher's aide whose class is part of the evaluation, either as a Planned Variation program or a comparison class. We greatly appreciate the effort you make in answering the questions. To help keep your responses confidential we have provided a pre-addressed, stamped envelope for direct mailing to:

Tor Meeland
Head Start P.V. Evaluation
Stanford Research Institute
Menlo Park, California 94025

If you have any questions regarding procedures or if some of the instructions are not clear, please contact the SRI Site Coordinator who distributed this form to you or call us directly by placing a collect call to SRI, (415) 326-6200 and ask for Mary Anastole (Extension 3668) or Sandra Murphy (Extension 3503).

Stanford Research Institute

Menlo Park, California

1971

1. How did you happen to become a teacher aide?
 1. Worked in Head Start as a volunteer
 2. Worked in other programs for children (for example, Day Care Center)
 3. Applied after talking to aide, parent, teacher, or other school personnel
 4. Friend told me of opening
 5. Was member of Policy Advisory Committee (PAC)
 6. Other (specify) _____

2. Have you had any training specifically for Head Start teacher aides?

1. No (GO ON TO QUESTION 2d)
2. Yes 2a. Please check as many of the following as apply:
 1. Head Start workshop of five days or more
 2. Head Start workshop of less than five days
 3. Inservice meetings for Head Start
 4. Specific course or courses given for Head Start teacher aides at nearby college
 5. Other (specify) _____

2b. In general, how helpful has this training been to you in your work as a teacher aide?

1. Very helpful
2. Somewhat helpful
3. Not helpful

2c. What part of the training was particularly helpful?

2d. What kind of training or assistance do you think would help you most as a Head Start Aide? _____

3a. Which of the following are included in your present duties as a Teacher Aide? Check every item which you perform.

Item Number	Present Duties
1. Encourage children to talk about their experiences and their activities	<input type="checkbox"/>
2. Help groups of children with activities in art, reading skills, etc.	<input type="checkbox"/>
3. Give children individual attention	<input type="checkbox"/>
4. Read to children	<input type="checkbox"/>
5. Take children to and from the playground for walks, field trips, etc.	<input type="checkbox"/>
6. Generally assist teacher in all she does	<input type="checkbox"/>
7. Help serve food--snacks, breakfast, lunch	<input type="checkbox"/>
8. Help clean up after meals	<input type="checkbox"/>
9. Relieve teacher of details	<input type="checkbox"/>
10. Help teacher in planning lessons and/or activities	<input type="checkbox"/>
11. Prepare materials for classroom use	<input type="checkbox"/>
12. Ride the school bus	<input type="checkbox"/>
13. Visit parents	<input type="checkbox"/>
14. Other _____	<input type="checkbox"/>

3b. With which of your present duties are you most satisfied?
(Please list by Item Number).

Item Number

{ Why?

3c. With which of your present duties are you least satisfied?
(Please list by Item Number).

Item Number

{ Why?

4. In general, how satisfied are you with the way your time is being used as a Head Start Teacher Aide? (Check one)

1	2	3	4	5
Very Satisfied	Satisfied	Have Mixed Feelings	Dissatisfied	Very Dissatisfied

- a. What suggestions do you have for making better use of your time?

5. Do you have skills which can be useful to the Head Start Program but which are not being used?

Yes No

- a. If yes, explain:

6. How does the Head Start Program help you? Check as many as you wish.

1. Helps me understand my own children.
2. Helps me handle any children better at home.
3. Helps me learn something new every day.
4. Encourages me to continue my training in social work, elementary education, ect.
5. Other (Are there other ways in which your job as a Teacher Aide is helping you?)

6. Does not help me

7. Are you included in staff meetings?

Yes No

If yes, how often do you participate in decision making?

regularly occasionally never

8. Do you feel you are an important part of the program?

Yes No

If no, do you have any suggestions to improve this situation?

9. Which of the following do you feel would help you as a Teacher Aide in the Head Start Program? (Check as many as you wish.)

1. More training on what to do when children have problems
2. Courses related to the job (e.g., Child Development).
3. More time to work with parents in the center.
4. More time for home visits.
5. More help from the teacher.
6. More help in understanding our model or program
7. None of these.
8. Other: _____

10. How do you feel about the working conditions in your classroom?

	<input checked="" type="checkbox"/> Very Satisfied	Have Mixed Feelings	Very Dissatisfied
1. Equipment	_____	_____	_____
2. Supplies	_____	_____	_____
3. Classroom Space	_____	_____	_____
4. Class Schedule	_____	_____	_____
5. Salary	_____	_____	_____
6. Planning Time with Teacher	_____	_____	_____

11. Do you have any suggestions that might help the children in the Head Start Program?

1. No
2. Yes--please explain: _____

12. How much do you think the teacher is enjoying her work in Head Start?

1. Very much
2. Somewhat
3. Not very much

Comment if you wish: _____

13. Do you think the teacher is pleased to have you as a Teacher Aide helping her?

1. Very pleased
2. Somewhat pleased
3. Not very pleased

Comment if you wish: _____

14. Do you think a better feeling between you and your co-workers could be achieved?

Yes No

If yes, in what way? _____

15. Do you now live in the neighborhood of the school where you work?

1. No
2. Yes--About how long have you lived in this neighborhood?
*3. Less than 1 year
4. 1 to 3 years
5. 4 to 6 years
6. 7 to 9 years
7. 10 years or more

16. Please check your ethnic group:

Caucasian			Negro/ Black	American Indian	Oriental	Other Non- Caucasian (Specify)
Mexican- American	Puerto Rican	Other				

17. Are you:

- | | |
|--------------------------------------|--|
| 1. <input type="checkbox"/> Single | 4. <input type="checkbox"/> Separated |
| 2. <input type="checkbox"/> Married | 5. <input type="checkbox"/> Widowed |
| 3. <input type="checkbox"/> Divorced | 6. <input type="checkbox"/> Other: _____ |

18. Do you have any children?

1. No

2. Yes. Are they or have they ever been in Head Start?

1. No

2. Yes

19. How old were you on your last birthday? _____ years

20. Are you: 1. Male 2. Female

21. Please circle the highest grade you have completed:

Grade School	High School	College
1 2 3 4 5 6	7 8 9. 10 11 12	13 14 15 +

22. As of June, 1971, how many years of teacher aide or teaching experience will you have had in each of the following?

_____ year(s) in Head Start

_____ year(s) in other pre-school programs

_____ year(s) in kindergarten or first grade

Other experience--Explain: _____

23. What language do you speak best? _____

24. What is your title in Head Start?

Teacher Aide _____

Assistant Teacher _____

Associate _____

Other _____

25. Please make any comments or suggestions that you feel might be helpful to us.

Sponsor

Community

Sponsor Implementation Report (1970-71)

1. Please identify the problems you have experienced in this community that increased the difficulty of implementation of your program, i.e.:

a. Children

b. Teachers

c. Parents

d. Community

e. Head Start Administration

f. Other

2. What have been the successes, or encouraging changes that have occurred, i.e.:

a. Children

b. Teachers

c. Parents

d. Community

e. Head Start Administration

f. Other

3. Please rate the site on the following variables, considering either the frequency or extent of occurrence for each variable. (These items are culled from consultant's reports, selecting variables that seem related to program implementation; if for the particular circumstances in the community the variables have surprising relation to the model's operation, please indicate this in your comments.)

		<u>Low</u>		<u>High</u>		<u>Comments</u>
a.	Turnover rate of teachers	1	2	3	4	5
b.	Turnover rate of aides	1	2	3	4	5
c.	Turnover rate of children	1	2	3	4	5
d.	Intra-staff friction	1	2	3	4	5
e.	Regular attendance of teachers	1	2	3	4	5
f.	Punctuality of teachers	1	2	3	4	5
g.	Regular attendance of children	1	2	3	4	5
h.	Support of local Head Start personnel for the model	1	2	3	4	5
i.	Support of the community for the model	1	2	3	4	5
j.	Support of PAC for the model	1	2	3	4	5
k.	Adequacy of physical plant:					
	(1) indoors	1	2	3	4	5
	(2) outdoors	1	2	3	4	5
l.	Availability of sponsor guidance	1	2	3	4	5
m.	Sponsor feedback to the teacher	1	2	3	4	5
n.	Rapport between administrator and staff	1	2	3	4	5
o.	Rapport between staff and children	1	2	3	4	5
p.	Rapport between sponsor staff and local Head Start staff	1	2	3	4	5

4. Please describe your training activities:

	<u>For Teachers</u>	<u>For Aides</u>	<u>For Parents</u>
a. Pre-service training			
(1) Total no. of hours			
(2) Location of training			
(3) How many days did the pre-service training cover?			
(4) Who gave the training?			
(5) What subject areas were covered?			
(6) What areas were you unable to cover to your satisfaction?			
(7) How effective was the training?			
(8) Was there any training not given by you that occurred?			
a) If yes, a) what was it?			
b) Did it help or hinder your program?			
b. In-service training			
(1) Total no. of hours			
(2) Location of training			
(3) How many days did the in-service training cover?			
a) Is the training monthly, bi-monthly, etc.?			

	<u>For Teachers</u>	<u>For Aides</u>	<u>For Parents</u>
(4) Who gave the training?			
(5) What subject areas were covered?			
(6) What areas were you unable to cover to your satisfaction?			
(7) How effective was this training?			
(8) Was there any training <u>not given by you</u> that occurred?			
If yes, a) what was it?			
b) Did it help or hinder your program?			

Date completed

ASSESSMENT OF SITE (COMMUNITY)

Please rate the site on the following variables, considering either the frequency or extent of occurrence for each variable. (These items are culled from consultant's reports, selecting variables that seem related to program implementation. Place check marks to the left of those variables that seem particularly relevant to your model's operation.) Circle the number that best reflects your rating.

		<u>Low</u>					<u>High</u>					<u>Comments</u>
		1	2	3	4	5	1	2	3	4	5	
1.	Turnover rate of teachers											
2.	Turnover rate of aides											
3.	Turnover rate of children											
4.	Intra-staff friction											
5.	Regular attendance of teachers											
6.	Punctuality of teachers											
7.	Regular attendance of children											
8.	Support of local Head Start personnel for the model											
9.	Support of PAC for the model											
10.	Support of the community for model											
11.	Adequacy of physical plant - indoors											
12.	Adequacy of physical plant - outdoors											
13.	Availability of sponsor guidance											
14.	Sponsor feedback to the teacher											
15.	Rapport between administrator and staff											
16.	Rapport between Planned Variation staff and children											
17.	Rapport between sponsor staff and local Head Start staff											

How effective do you think the sponsor's training has been with regard to helping the (a) teachers, (b) aides and (c) parents implement the sponsor's program?

	<u>High</u>	<u>Low</u>				
(a) Teachers	1	2	3	4	5	NA
(b) Aides	1	2	3	4	5	NA
(c) Parents	1	2	3	4	5	NA



CLASSROOM OBSERVATION PROCEDURE

CLASSROOM CHECK LIST (be sure to code **EVERYONE** in the class)

A 1. Snack, lunch

ONE CHILD	TWO CHILDREN	SMALL GROUPS	LARGE GROUPS
T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3

2. Group time, sharing, rest

T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3
--	--	--	--

B

3. Story, singing, dancing

T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3
--	--	--	--

4. Numbers

T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3
--	--	--	--

C

5. Alphabet, reading, language development

T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3
--	--	--	--

6. Finding out about people and how they live

T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3
--	--	--	--

D

7. Finding out about the natural world
(magnets, shapes, sound)

T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3
--	--	--	--

E

8. Table games, guessing games, working puzzles

T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3
--	--	--	--

9. Arts, crafts

T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3
--	--	--	--

F

10. Cooking, sewing, pounding, or sawing

T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3
--	--	--	--

11. Blocks, trucks

T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3
--	--	--	--

G

12. Dolls, dress-up, water play

T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3
--	--	--	--

13. Active play

T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3	T 1 2 3 A 1 2 3 V 1 2 3 I 1 2 3
--	--	--	--

ADULTS WITHOUT CHILDREN

14. Classroom management	7	8	9	10 11 12 13	14	15	16	17
15. Observing	7	8	9	10 11 12 13	14	15	16	17
16. Out of the room	7	8	9	10 11 12 13	14	15	16	17
17. Other	7	8	9	10 11 12 13	14	15	16	17

FIVE-MINUTE OBSERVATION

What's happening?

KEY

R—Repeat

Who and To Whom

T — Teacher
A — Assistant/Aide
V — Volunteer

C — Child
D — Different Child
2 — Two Children

S — Small Group
L — Large Group
E — Everyone

M — Materials
O — Confusion

C—Cancel

How

H — Happy
S — Sad
N — Negative
A — Angry

G — Guide to alternative
R — Reason
C — Control by praising
Q — Question

F — Firm
D — Demean
Th — Threaten
P — Punish

T — Touch
O — Object
SY — Symbol

What

- 1 — Direct request
- 2 — Choice request
- 3 — Respond
- 4 — Teach, Inform
- 5 — Comment, Play
- 6 — Praise
- 7 — Acknowledge
Help
- 8 — Cooperate
- 9 — Corrective feedback
- 10 — No response, Ignore,
"I don't know"
- 11 — Refuse, Reject
- 12 — Observe
- 0 — Confusion

V — Verbal
N/V — Non-verbal

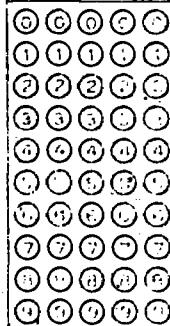
Number of Children ○○○○

Adult Participation

Teacher	○	○
Assistant/Aide	○	○
Volunteer	○	○

Activity

FOR NCS
USE ONLY

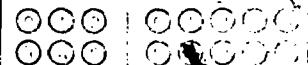


TIME STARTED

Hour



Minute



Who	To Whom	What	How
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input type="radio"/> L
<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> O	<input type="radio"/> P
<input type="radio"/> Q	<input type="radio"/> R	<input type="radio"/> S	<input type="radio"/> T
<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

Who	To Whom	What	How
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input type="radio"/> L
<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> O	<input type="radio"/> P
<input type="radio"/> Q	<input type="radio"/> R	<input type="radio"/> S	<input type="radio"/> T
<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

2 Who	To Whom	What	How
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input type="radio"/> L
<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> O	<input type="radio"/> P
<input type="radio"/> Q	<input type="radio"/> R	<input type="radio"/> S	<input type="radio"/> T
<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

10 Who	To Whom	What	How
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input type="radio"/> L
<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> O	<input type="radio"/> P
<input type="radio"/> Q	<input type="radio"/> R	<input type="radio"/> S	<input type="radio"/> T
<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

3 Who	To Whom	What	How
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input type="radio"/> L
<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> O	<input type="radio"/> P
<input type="radio"/> Q	<input type="radio"/> R	<input type="radio"/> S	<input type="radio"/> T
<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

11 Who	To Whom	What	How
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input type="radio"/> L
<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> O	<input type="radio"/> P
<input type="radio"/> Q	<input type="radio"/> R	<input type="radio"/> S	<input type="radio"/> T
<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

4 Who	To Whom	What	How
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input type="radio"/> L
<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> O	<input type="radio"/> P
<input type="radio"/> Q	<input type="radio"/> R	<input type="radio"/> S	<input type="radio"/> T
<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

12 Who	To Whom	What	How
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input type="radio"/> L
<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> O	<input type="radio"/> P
<input type="radio"/> Q	<input type="radio"/> R	<input type="radio"/> S	<input type="radio"/> T
<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

5 Who	To Whom	What	How
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input type="radio"/> L
<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> O	<input type="radio"/> P
<input type="radio"/> Q	<input type="radio"/> R	<input type="radio"/> S	<input type="radio"/> T
<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

13 Who	To Whom	What	How
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input type="radio"/> L
<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> O	<input type="radio"/> P
<input type="radio"/> Q	<input type="radio"/> R	<input type="radio"/> S	<input type="radio"/> T
<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

6 Who	To Whom	What	How
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input type="radio"/> L
<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> O	<input type="radio"/> P
<input type="radio"/> Q	<input type="radio"/> R	<input type="radio"/> S	<input type="radio"/> T
<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

14 Who	To Whom	What	How
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input type="radio"/> L
<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> O	<input type="radio"/> P
<input type="radio"/> Q	<input type="radio"/> R	<input type="radio"/> S	<input type="radio"/> T
<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

7 Who	To Whom	What	How
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input type="radio"/> L
<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> O	<input type="radio"/> P
<input type="radio"/> Q	<input type="radio"/> R	<input type="radio"/> S	<input type="radio"/> T
<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

15 Who	To Whom	What	How
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input type="radio"/> L
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<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

8 Who	To Whom	What	How
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<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
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<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

16 Who	To Whom	What	How
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<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H
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<input type="radio"/> Q	<input type="radio"/> R	<input type="radio"/> S	<input type="radio"/> T
<input type="radio"/> U	<input type="radio"/> V	<input type="radio"/> W	<input type="radio"/> X
<input type="radio"/> Y	<input type="radio"/> Z	<input type="radio"/> AA	<input type="radio"/> BB

49	Who	To Whom	What	How
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55	Who	To Whom	What	How
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50	Who	To Whom	What	How
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56	Who	To Whom	What	How
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51	Who	To Whom	What	How
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57	Who	To Whom	What	How
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52	Who	To Whom	What	How
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58	Who	To Whom	What	How
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53	Who	To Whom	What	How
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59	Who	To Whom	What	How
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54	Who	To Whom	What	How
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TIME STOPPED

Hour Minute

10:00:00

Yes No N/A

- The children move freely around the classroom.
- Children pay attention to what the adult says or does.
- Adults pay attention to what the children say or do.
- The adult uses respectful and polite words with children.
- Children remain attentive to their task over most or all of the Five Minute Observation.

Appendix C

Included in this appendix are analyses referred to, but not fully described, in the body of the report:

1. Sponsor ratings: first vs. second year teachers
2. Correlations between sponsors' and teachers' accounts of training.
3. Correlations between support variables
4. Correlations between sponsor and consultant site assessments
5. Sponsor ratings: analysis of variance for February
6. Training variables as predictors of mean levels of implementation
7. Staff variables as predictors of mean levels of implementation
8. Context variables as predictors of mean levels of implementation
9. Training variables as predictors of levels of implementation.
10. Staff and context variables as predictors of levels of implementation
11. Chi-Square analyses of dichotomous variables

TABLE C-1

Sponsors' Ratings
First vs. Second Year Teachers

Source	df	Mean Square	F-Test	% Total Sum of Squares
Sites	7	5.877	1.585	13.14
Teacher's years of experience	1	1.042	0.281	0.33
Site X experience	7	2.584	0.697	5.78
Class within site+	52	3.708	NOT TESTED	61.60
Time of rating	1	0.281	0.381	0.09
Site X rating-time	7	2.174	2.951	4.86
Experience X rating-time	1	0.420	0.570	0.13
Site X experience X rating-time	7	0.820	1.113	1.83
Class X rating-time+	52	0.737	NOT TESTED	12.23
TOTAL	135	2.319		100.00

Note: +: marks the effect used in testing the preceding effects.

Appendix A describes the sample on which the analysis is based; model effects are not considered.

The analysis demonstrates that second year teachers do not achieve higher levels of implementation than first year teachers according to sponsor ratings. The significant site by rating-time interaction indicates that not all sites have the same relationship between February and May inspection of site means reveals that half the site means go down from February to May.

TABLE C-2
Correlations between Sponsors' and Teachers'
 Accounts of Training

		SI#4a:				
<u>Pre-service training:</u>		TQ# 5	(1)	(2)	(3)	(4)
TQ# 5	Number days of training	1.0	.20	.23	-.04	.02
SI#4a	(1) Number hours of training for teachers		1.0	.92	.20	.23
	(2) Number hours of training for aides			1.0	.15	.24
	(3) Number days of training for teachers				1.0	.99
	(4) Number days of training for aides					1.0
<u>In-service training:</u>		TQ# 8	(1)*	(2)	(3)	(4) (5)
TQ# 8	Frequency of training	1.0	-.52	.18	.21	-.00 .04
SI#4b	(1) Frequency of training		1.0	-.63	-.65	-.26 -.28
	(2) Number hours for teachers			1.0	.99	.61 .61
	(3) Number hours for aides				1.0	.56 .61
	(4) Number days for teachers					1.0 .94
	(5) Number days for aides					1.0

Notes: *The scale for the teachers' frequency of training item is opposite those for the sponsor report item; in the Teacher Questionnaire a low number indicates low frequency.

TQ: Teacher Questionnaire

SI: Sponsor Implementation Report

These are site level correlations: for the Sponsor Implementation Report there is one observation per site; for the Teacher Questionnaire, the site mean is used.

TABLE C-3

Correlations Between Support Variables

	TQ#12	TQ#13	SI#3.1	SI#3.m	CR#13	CR#14
Sponsor most frequently asked for help: TQ#12	1.0	-.02	.23	.02	.40	.46
Trainers stay long enough to help: TQ#13*		1.0	-.52	-.63	-.57	-.48
Availability of sponsor guidance (sponsor): SI#3.1			1.0	.79	.59	.47
Sponsor feedback to the teachers (sponsor): SI#3.m				1.0	.39	.28
Availability of sponsor guidance (consultant): CR#13					1.0	.81
Sponsor feedback to the teachers (consultant): CR#14						1.0

*yes=1, no=2

Note: Since four of the six variables in the table are site variables (there is only one observation per site), the site level correlations are given here; the correlations between individuals classrooms are considerably lower in most cases...

When the site is used as the basic unit, the correlations are based on a small number of observations: correlations involving the Sponsor Implementation Report have only 20 observations; the others have 34 or 37 observations.

The support variables are taken from three sources: the teachers (TQ#12 and 13), the sponsors (SI#3.1 and 3.m), and the OCD consultants (CR#13 and 14). Since the variables are intended

C-3 continued

to measure a single dimension, continuing support and feedback, we would expect them to be highly correlated. The table above, however, shows that, with the exception of relationships between variables from the same source (e.g., the sponsor's judgment of availability of sponsor guidance correlates .79 with the sponsor's judgment of sponsor feedback to the teachers), the correlations are relatively small. There are two possible explanations for this finding. First, it may be that the variables are not as closely related as had been thought. This seems particularly possible for the first variable listed, the teacher going to the sponsor most frequently for help, as evidenced by the lack of correlation between this variable and the other teacher variable (-.02). For the remainder of the variables, however, a second explanation is more persuasive: the variables really are related on a single dimension, but the available measures are too unreliable to reflect it. The evidence for this position is based on the finding that the correlations between different items from the same source are higher than the correlations between identical items from different sources. For example, from the sponsors' reports, the correlation between availability of guidance and feedback to the teachers is .79, while the correlation between the sponsors' and the consultants' judgments of availability of guidance is only .59, and the correlation between the two sources on ratings of feedback is even lower, at .28. This suggests that the questionnaires are internally consistent, but not reliable.

TABLE C-4

Correlations Between Sponsor and Consultant
Site Assessments

1. Turnover rate of teachers	.45
2. Turnover rate of aides	.38
3. Turnover rate of children	.10
4. Intra-staff friction	.16
5. Regular attendance of teachers	.37
6. Punctuality of teachers	.15
7. Regular attendance of children	.54
8. Support of local Head Start personnel for the model	.60
9. Support of PAC for the model	-.16
10. Support of the community for model	.21
11. Adequacy of physical plant - indoors	.68
12. Adequacy of physical plant - outdoors	.38
13. Availability of sponsor guidance	.59
14. Sponsor feedback to the teacher	.25
15. Rapport between administrator and staff	.43
16. Rapport between Planned Variation staff and children	.12
17. Rapport between sponsor staff and local Head Start staff	.29

Note: The correlations are based on 20 observations
because there are sponsor reports for only 20 sites.

TABLE C-5
 Sponsor Ratings
Analysis of Variance for February

Source	df	Mean Square	F-Test	% of Total Sum of Squares
Model	5	2.144	0.704	3.13
Site within model	12	6.321	2.076*	22.15
Class within site†	84	3.045	NOT TESTED	74.72
Total	101	3.390		100.00

Note: + indicates the effect used in testing the preceding effects

TABLE C-6

Training Variables as Predictors
of Mean Levels of Implementation

Variable Name	b	SE _b	b*	T-test	df	Significance
SI#4b Number of days in-service training for teachers	0.0282	0.009	0.511	3.10	24	.005
TQ#6 Whether teacher had group discussion in in-service	0.8820	0.495	0.294	1.78	24	.088
Regression Constant	3.639					

$R^2 = 0.346$ $F = 6.35$ with 2 and 24 degrees of freedom
 $R = 0.588$ ($p = .007$)

$$SD_{res} = 0.844$$

Partial Correlations with Dependent Variable for Variables Not Entered.

SI#4a Number days pre-service training for teachers	0.181
TQ#6 Whether sponsor gave some pre-service	-0.124

TABLE C-7

Staff Variables as Predictors of
Mean Levels of Implementation

	Variable Name	b	SEb	b*	T Test	df	Significance
AQ#26	Helpfulness of aide's training	-2.5822	0.856	-0.420	-3.02	22	.007
TQ#38	Teacher's race	0.7214	0.457	0.245	1.58	22	.129
AQ#10	Aide's satisfaction with equipment	-0.6258	0.288	-0.303	-2.18	22	.041
TQ#42	Teacher's years in Head Start	-0.2476	0.139	-0.276	-1.78	22	.090
	Regression Constant			9.619			

$F = 8.35$ with 4 and 22 degrees of freedom
 $(P < .001)$

$$\begin{aligned} R^2 &= 0.603 \\ R &= 0.776 \end{aligned}$$

$$SD_{res} = 0.687$$

TABLE C-8

Context Variables as Predictors of
Mean Levels of Implementation

Variable Name	b	SE _b	b*	T-Test	df	Significance
SI#3.d Intra-staff friction	-0.5109	0.051	-0.637	-10.05	24	.001
SI#3.n Rapport between staff and administration	0.4937	0.058	0.544	8.58	24	.001
Regression Constant	4.898					

F = 125.16 with 2 and 24 degrees of freedom

$$R^2 = 0.913$$

$$R = 0.955$$

$$SD_{res} = 0.309$$

Partial Correlations with Dependent Variable for Variables Not Entered

SI#3.k Adequacy of physical plant indoors	0.859
SI#3.o Rapport between staff and children	0.717
SI#3.p Rapport between sponsor staff and local staff	1.097

Note: The large partial correlation for SI#3.p indicates that this variable was responsible for the abortion of this regression; it was removed from further analysis.

TABLE C-9

Training Variables as Predictors
of Levels of Implementation

	Variable Name	b	SE _b	b*	T-Test	df	Significance
SI#3.d	Intra-staff friction	-0.4866	0.100	-0.356	-4.86	156	< .001
SI#3.n	Rapport between administration and staff	0.3876	0.167	0.189	2.32	156	.022
SI#3.k	Adequacy of physical plant indoors	-0.0567	0.127	-0.034	-0.45	156	> .500
TQ#9	Number types of in-service from local HS	-0.1223	0.052	-0.176	-2.33	156	.021
TQ#9	Whether teacher had in-service group discuss.	1.0554	0.414	0.172	2.55	156	.012
TQ#6	Whether sponsor gave some pre-service	0.5589	0.240	0.161	2.32	156	.022
TQ#6	Whether local HS gave some pre-service	-0.4916	0.262	-0.142	-1.88	156	.063
TQ#11	Whether teacher requested help	.4727	0.379	0.083	1.25	156	.215
	Regression Constant		4.071				

$R^2 = 0.379$
 $R = 0.616$
 $SD_{res} = 1.403$

F = 11.92 with 8 and 156 degrees of freedom
 (p < .001)

Partial Correlations with Dependent Variable for Variables Not Entered

TQ#5 # days pre-service received 0.039

TABLE C-10

Staff and Context Variables as Predictors
of Levels of Implementation

Variable Name	b	SE _b	b*	T-Test	df	Significance
SI#3.d Intra-staff friction	-0.4745	.0.107	-0.347	-4.43	160	.001
SI#3.n Rapport between administration and staff	0.4971	0.170	0.243	2.93	160	.004
SI#3.k Adequacy of physical plant indoors	0.0886	0.125	0.053	0.71	160	.480
TQ#42 Teacher's years experience in Head Start	-0.1316	0.071	-0.128	-1.85	160	.066
Regression Constant	4.901					

F = 18.18 with 4 and 160 degrees of freedom
 (p .001)

R = 0.312

R = 0.559

SD_{res} = 1.458

Partial Correlations with Dependent Variable for Variables Not Entered

TQ#24 Teacher's satisfaction with working conditions	-0.027	
TQ#39 Degree of parent involvement	-0.037	
TQ#36 Teacher's age	-0.065	
TQ#38 Teacher's race	0.053	

TABLE C-11
Chi-Square Analyses of Dichotomous Variables

Variable TQ#	χ^2 site	χ^2 model	χ^2 site-model
4	107.925 ***	39.984 ***	67.941 ***
5 Sponsor	90.714 ***	47.582 ***	43.132 *
5 Consultant	82.110 ***	44.160 ***	37.950 *
5 Local HS	92.944 ***	31.287 **	61.657 ***
5 Other	53.118 *	14.992 NS	38.126 *
5 Demonstration	77.129 ***	41.929 ***	35.200 NS
5 Lecture	120.686 ***	46.506 ***	74.180 ***
5 Indiv. mtg.	81.593 ***	26.837 **	54.756 ***
5 Grp. discuss.	98.534 ***	40.064 ***	58.470 ***
5 video	93.481 ***	47.804 ***	45.677 **
5 Observation	82.903 ***	45.855 ***	37.046 NS
5 Role play	92.138 ***	44.024 ***	48.114 **
9 Sponsor	77.457 ***	31.000 **	46.457 **
9 Consultant	74.498 ***	25.639 **	48.859 **
9 Local HS	73.411 ***	17.454 NS	55.957 ***

Variable	TQ#	χ^2 site	χ^2 model	χ^2 site-model
9 Other		50.989 *	25.561 **	25.428 NS
9 Demonstration		72.540 ***	26.961 **	46.519 **
9 Lecture		74.655 ***	19.414 NS	55.241 ***
9 Indiv. mtg..		48.434 NS	15.716 NS	32.718 NS
9 Grp. discuss.		74.963 ***	18.347 NS	56.616 ***
9 Video		88.114 ***	36.850 ***	51.264 ***
9 Observation		59.577 **	15.508 NS	44.069 *
9 Role play		105.740 ***	40.932 ***	64.808 ***
11		44.618 NS	17.038 NS	27.580 NS
12 Sponsor		66.820 **	18.784 NS	48.036 **
12 H.S. Director		55.497 *	22.344 *	33.153 NS
12 Teacher		67.357 **	21.570 *	45.787 NS
12 Other		70.335 ***	32.278 ***	38.057 *
13		76.463 ***	34.030 ***	42.433 *
33		94.077 ***	54.636 ***	39.441 *
40 Early child.		80.888 ***	28.114 **	52.774 ***

Variable TQ#	χ^2_{site}	χ^2_{model}	$\chi^2_{\text{site-model}}$
40 Nursery course	80.157 ***	37.129 ***	43.028 *
40 Nursery practice	52.734 *	19.285 NS	33.449 NS
40 K-2 course	44.686 NS	17.728 NS	26.958 NS
40 K-2 practice	42.329 NS	13.140 NS	29.189 NS
41	101.051 ***	36.936 ***	64.115 ***
43	74.993 ***	27.363 *	47.630 **
45	86.833 ***	28.111 **	58.722 ***
46	49.247 NS	16.702 NS	32.545 NS
38	94.081 ***	31.038 **	63.043 ***
AQ#5	44.993 NS	15.824 NS	29.169 NS
AQ#9	39.560 NS	4.119 NS	35.441 NS
AQ#15	64.750 **	21.330 *	43.420 **
AQ#16	97.689 ***	48.941 ***	48.748 **

Note: From the contingency analysis we can obtain a χ^2 for models without regard for sites and a χ^2 for sites without regard for models. The figures which result from these analyses are shown for each variable in the first two columns of the table. Since sites are nested within models, however, a further analysis is necessary to test differences between

sites when model effects are taken into account. To obtain an estimate of sites within models, we subtract the χ^2 for models from the χ^2 for sites. To test the significance of the resulting χ^2 's, we obtain the corresponding degrees of freedom by subtracting degrees of freedom for models from degrees of freedom for sites. The results of these operations are shown for each variable in the third column of the table. The first row for each variable contains the χ^2 , and the second row shows its significance. Conventional notation is used:

*** = $p < .001$
** = $p < .01$
* = $p < .05$
NS = not significant

χ^2 sites has 36 df, χ^2 models, has 11, and χ^2 sites-models has 25.

Appendix D

The following tables give the means and standard deviations for all sites and models on variables presented in Chapter 3. The variables are organized under the following headings:

1. Pre-service training
2. In-service training
3. Continuing support and feedback
4. Staff background
5. Context
6. Final Consultant Report site assessment
7. Sponsor Implementation Report

TABLE E-1

Table D-1 (cont.)

TABLE D-2
INTERVIEWS: TRAINING
MEANS & STANDARD DEVIATIONS

No. Variable	All Schools		Private		Public		Oregon		Washington		Las Vegas		Orlando	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
8 Received in-service training (1 = daily, 7 = Once this year)	5.3	5.6	4.0	0.0	6.0	6.0	5.1	5.1	4.6	4.8	5.0	4.3	6.2	6.0
8 Frequency of in-service training (1 = daily, 7 = Once this year)	5.3	5.6	4.0	0.0	6.0	6.0	5.1	5.1	4.6	4.8	5.0	4.3	6.2	6.0
9 Kind of in-service training (1 = Check...B = no check)														
Instructional lessons	0.71	0.62	1.12	0.75	0.00	0.81	0.86	0.79	0.71	0.75	0.73	1.00	0.60	0.50
SD	(.34)	(.38)	(.11)	(.8)	(2)	(.6)	(.7)	(.7)	(.6)	(.7)	(.7)	(.7)	(.7)	(.7)
(N)														
Lectures	0.88	0.88	1.00	0.00	1.00	0.00	0.86	0.82	0.71	1.00	1.00	0.52	0.50	0.50
SD	(.32)	(.32)	(.11)	(.8)	(2)	(.6)	(.7)	(.7)	(.6)	(.7)	(.7)	(.7)	(.7)	(.7)
(N)														
Individual meetings	0.71	0.62	0.63	0.60	1.00	0.57	0.68	0.75	0.75	0.86	0.95	1.00	0.60	0.50
SD	(.34)	(.46)	(.11)	(.8)	(2)	(.6)	(.7)	(.7)	(.6)	(.7)	(.7)	(.7)	(.7)	(.7)
(N)														
Group discussions	0.88	0.88	1.00	0.00	1.00	0.00	0.86	0.93	0.88	1.00	0.94	1.00	0.92	1.00
SD	(.32)	(.32)	(.11)	(.8)	(2)	(.6)	(.7)	(.7)	(.6)	(.7)	(.7)	(.7)	(.7)	(.7)
(N)														
Discussion of videotaped lessons	0.68	1.02	0.63	0.60	0.83	0.29	0.54	0.29	0.25	1.00	0.52	0.25	0.77	0.50
SD	(.47)	(.47)	(.11)	(.8)	(2)	(.6)	(.7)	(.7)	(.6)	(.7)	(.7)	(.7)	(.7)	(.7)
(N)														
Observations	0.68	0.91	0.75	0.00	0.67	0.43	0.61	0.53	0.50	0.86	0.79	0.75	0.85	0.80
SD	(.47)	(.47)	(.11)	(.8)	(2)	(.6)	(.7)	(.7)	(.6)	(.7)	(.7)	(.7)	(.7)	(.7)
(N)														
Role Playing	0.92	1.62	0.88	0.00	1.00	0.57	0.21	0.06	0.00	0.71	0.73	0.50	0.85	0.57
SD	(.38)	(.38)	(.11)	(.8)	(2)	(.6)	(.7)	(.7)	(.6)	(.7)	(.7)	(.7)	(.7)	(.7)
(N)														
Other	0.44	0.63	0.24	0.00	0.47	0.33	0.42	0.34	0.34	0.87	0.34	0.36	0.45	0.39
SD	(.36)	(.36)	(.11)	(.8)	(2)	(.6)	(.7)	(.7)	(.6)	(.7)	(.7)	(.7)	(.7)	(.7)
(N)														
Who gave in-service training (Number of different types of training given by)														
No Response	1.00	0.46	1.46	0.00	0.67	1.83	2.43	3.23	2.25	0.57	1.61	2.00	1.53	0.75
SD	(.31)	(.31)	(.11)	(.8)	(1)	(.6)	(.7)	(.7)	(.7)	(.7)	(.7)	(.7)	(.7)	(.7)
(N)														
Sponsor representative	3.48	5.02	3.88	0.00	4.00	2.33	2.50	1.41	4.25	4.14	4.00	4.25	4.03	3.40
SD	(.31)	(.31)	(.11)	(.8)	(1)	(.6)	(.7)	(.7)	(.7)	(.7)	(.7)	(.7)	(.7)	(.7)
(N)														
Consultant	1.58	1.82	1.63	0.00	1.00	1.67	2.50	1.53	0.59	6.00	4.07	3.50	5.17	2.75
SD	(.31)	(.31)	(.11)	(.8)	(2)	(.6)	(.7)	(.7)	(.6)	(.7)	(.7)	(.7)	(.7)	(.7)
(N)														
Local HS office	1.94	1.36	4.00	0.00	0.67	1.83	2.43	3.23	2.25	0.57	1.61	2.00	1.53	0.75
SD	(.31)	(.31)	(.11)	(.8)	(1)	(.6)	(.7)	(.7)	(.7)	(.7)	(.7)	(.7)	(.7)	(.7)
(N)														
Other	1.16	0.45	1.15	0.00	2.67	2.17	0.00	0.00	0.00	0.00	0.41	0.50	1.00	0.14
SD	(.31)	(.31)	(.11)	(.8)	(1)	(.6)	(.7)	(.7)	(.6)	(.7)	(.7)	(.7)	(.7)	(.7)
(N)														

Table D-2 (cont.)

TABLE D-3
Sensitivity of β Coefficients on Feedback
and Satisfaction Variables

B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025</th

Table D-3 (cont.).

TABLE D-4
Leaf Background Tissue Test Results

Table D-4 (cont.)

TABLE D-5

Context
Means and Standard Deviations

	20. A. Variable			
24	Satisfaction with working conditions (1=very satisfied, 5=fairly satisfied, 9=fairly dissatisfied)	X	2.19	2.38
	SD	0.48	0.34	0.49
	(N)	(133)	(111)	(7)
29	Parent involvement (low involvement-low involvement)	X	2.94	3.22
	SD	0.70	0.82	0.58
	(N)	(33)	(111)	(7)
30	Parent activities (1=usually, 4=once a year)	X	2.70	2.74
	SD	0.66	0.68	0.43
	(N)	(133)	(111)	(7)

Fig. 4. Variable

	20. A. Variable			
24	Satisfaction with working conditions (1=very satisfied, 5=fairly satisfied, 9=fairly dissatisfied)	X	2.33	2.07
	SD	0.63	0.44	0.17
	(N)	(133)	(5)	(4)
29	Parent involvement (low involvement-low involvement)	X	2.98	2.84
	SD	0.96	0.89	0.69
	(N)	(133)	(15)	(4)
30	Parent activities (1=usually, 4=once a year)	X	2.17	3.13
	SD	0.99	0.73	0.33
	(N)	(133)	(5)	(4)

Fig. 4. Variable

	20. B. Variable			
24	Satisfaction with working conditions (1=very satisfied, 5=fairly satisfied, 9=fairly dissatisfied)	X	2.33	2.37
	SD	0.14	0.16	0.14
	(N)	(91)	(26)	(5)
29	Parent involvement (low involvement-low involvement)	X	2.20	3.03
	SD	0.26	1.25	1.25
	(N)	(3)	(9)	(26)
30	Parent activities (1=usually, 4=once a year)	X	2.58	3.39
	SD	0.47	1.01	0.39
	(N)	(13)	(19)	(26)

Fig. 4. Variable

	20. C. Variable			
24	Satisfaction with working conditions (1=very satisfied, 5=fairly satisfied, 9=fairly dissatisfied)	X	2.33	2.37
	SD	0.14	0.16	0.14
	(N)	(91)	(26)	(5)
29	Parent involvement (low involvement-low involvement)	X	2.20	3.03
	SD	0.26	1.25	1.25
	(N)	(3)	(9)	(26)
30	Parent activities (1=usually, 4=once a year)	X	2.58	3.39
	SD	0.47	1.01	0.39
	(N)	(13)	(19)	(26)

Fig. 4. Variable

	20. D. Variable			
24	Satisfaction with working conditions (1=very satisfied, 5=fairly satisfied, 9=fairly dissatisfied)	X	2.33	2.37
	SD	0.14	0.16	0.14
	(N)	(91)	(26)	(5)
29	Parent involvement (low involvement-low involvement)	X	2.20	3.03
	SD	0.26	1.25	1.25
	(N)	(3)	(9)	(26)
30	Parent activities (1=usually, 4=once a year)	X	2.58	3.39
	SD	0.47	1.01	0.39
	(N)	(13)	(19)	(26)

	20. E. Variable			
24	Satisfaction with working conditions (1=very satisfied, 5=fairly satisfied, 9=fairly dissatisfied)	X	2.33	2.37
	SD	0.14	0.16	0.14
	(N)	(91)	(26)	(5)
29	Parent involvement (low involvement-low involvement)	X	2.20	3.03
	SD	0.26	1.25	1.25
	(N)	(3)	(9)	(26)
30	Parent activities (1=usually, 4=once a year)	X	2.58	3.39
	SD	0.47	1.01	0.39
	(N)	(13)	(19)	(26)

Table D-6

FINAL CONSULTANT REPORT SITE ASSES. MEAN, MEANS AND STANDARD DEVIATIONS

CR#	FAR West	Arizona	Arkansas	Oregon	Kansas	High Scope	Florida	Pittsburgh	EDC	REC	NYC	ENAPLERS	TOTAL
1. Turnover teachers	\bar{x} 1.2 SD .45	\bar{x} 2.0 SD 1.7	\bar{x} 1.5 SD .58	\bar{x} 3.0 SD 1.73	\bar{x} 2.0 SD 1.00	\bar{x} 1.0 SD 1.00	\bar{x} 2.6 SD 1.50	\bar{x} 2.0 SD 0.0	\bar{x} 1.0 SD 0.0	\bar{x} 1.0 SD 0.0	\bar{x} 2.0 SD 1.50	\bar{x} 1.5 SD 1.00	\bar{x} 1.8 SD 1.07
2. Turnover aides	\bar{x} 1.8 SD .45	\bar{x} 1.7 SD 1.16	\bar{x} 1.0 SD 0.0	\bar{x} 3.0 SD 1.73	\bar{x} 2.3 SD 1.56	\bar{x} 1.5 SD 1.58	\bar{x} 2.8 SD .96	\bar{x} 2.0 SD 1.0	\bar{x} 1.00 SD 1.0	\bar{x} 1.00 SD 1.0	\bar{x} 2.0 SD 1.0	\bar{x} 1.50 SD .58	\bar{x} 1.8 SD .92
3. Turnover children	\bar{x} 2.0 SD .71	\bar{x} 1.3 SD .57	\bar{x} 1.7 SD .96	\bar{x} 1.7 SD 1.16	\bar{x} 1.7 SD .58	\bar{x} 1.3 SD .50	\bar{x} 2.8 SD .57	\bar{x} 2.7 SD .71	\bar{x} 1.5 SD 1.0	\bar{x} 1.0 SD 1.0	\bar{x} 2.0 SD 1.0	\bar{x} 2.2 SD .96	\bar{x} 2.0 SD .83
4. Intra-staff friction	\bar{x} 2.6 SD 1.14	\bar{x} 1.7 SD .58	\bar{x} 2.2 SD .96	\bar{x} 1.7 SD 1.16	\bar{x} 2.0 SD 1.0	\bar{x} 3.0 SD .82	\bar{x} 3.8 SD .50	\bar{x} 2.5 SD .71	\bar{x} 1.0 SD 1.0	\bar{x} 1.0 SD 1.0	\bar{x} 3.0 SD 1.0	\bar{x} 2.5 SD 1.0	\bar{x} 2.4 SD 1.04
5. Reg. attend. of teachers	\bar{x} 4.0 SD 1.00	\bar{x} 4.3 SD .58	\bar{x} 3.8 SD 1.26	\bar{x} 2.3 SD .58	\bar{x} 4.7 SD .58	\bar{x} 3.0 SD 1.41	\bar{x} 3.7 SD 1.41	\bar{x} 4.0 SD 1.41	\bar{x} 4.0 SD 0.00	\bar{x} 5.0 SD 0.00	\bar{x} 4.0 SD 0.00	\bar{x} 4.0 SD 1.16	\bar{x} 3.9 SD 1.07
6. Punctuality of teachers	\bar{x} 4.0 SD 1.16	\bar{x} 4.7 SD .58	\bar{x} 3.5 SD 1.29	\bar{x} 4.3 SD 1.16	\bar{x} 4.0 SD 1.73	\bar{x} 3.5 SD 1.73	\bar{x} 4.0 SD 1.00	\bar{x} 4.0 SD 0.00	\bar{x} 4.0 SD 0.00	\bar{x} 5.0 SD 0.00	\bar{x} 4.0 SD 0.00	\bar{x} 4.2 SD .96	\bar{x} 4.1 SD 1.09
7. Reg. attend. of children	\bar{x} 3.8 SD 1.30	\bar{x} 4.3 SD .58	\bar{x} 4.0 SD .82	\bar{x} 3.7 SD 1.16	\bar{x} 3.2 SD 1.16	\bar{x} 3.0 SD .96	\bar{x} 3.5 SD 0.00	\bar{x} 0.0 SD .71	\bar{x} 5.0 SD 0.00	\bar{x} 4.0 SD .71	\bar{x} 3.0 SD 0.00	\bar{x} 3.0 SD .82	\bar{x} 3.7 SD .91
8: Support local HS for model	\bar{x} 3.8 SD 1.30	\bar{x} 4.3 SD .58	\bar{x} 3.0 SD 1.63	\bar{x} 4.0 SD 1.73	\bar{x} 4.0 SD 1.00	\bar{x} 3.2 SD 1.50	\bar{x} 3.2 SD 1.26	\bar{x} 3.0 SD 0.00	\bar{x} 5.0 SD 0.00	\bar{x} 5.0 SD 0.00	\bar{x} 3.0 SD 1.41	\bar{x} 4.0 SD 1.41	\bar{x} 3.6 SD 1.28

Site means are not given because only one rating was made at each site.

Support PAC for model	\bar{x} 3.4 SD .89	4.0 1.00	3.2 .96	2.0 1.00	3.7 .58	3.2 1.50	3.5 1.29	3.0 0.00	5.0 0.00	4.0 0.00	3.0 0.00	4.3 .58	3.5 .98
10. Support communicy for model	\bar{x} 3.6 SD 1.14	4.3 .58	3.5 .58	3.0 1.16	4.0 1.00	2.8 1.00	2.8 1.26	3.0 0.50	5.0 0.50	5.0 0.50	3.0 0.50	4.3 .58	3.6 1.09
11. Adeq. plant indoors	\bar{x} 4.0 SD .82	4.0 1.16	3.7 .82	2.7 1.52	3.0 2.00	2.2 .96	2.5 .58	3.0 1.41	5.0 2.00	5.0 2.00	2.0 2.00	3.5 .58	3.2 1.16
12. Adeq. plant outdoors	\bar{x} 3.5 SD 1.92	3.3 1.53	3.2 1.71	1.7 .58	1.3 .58	2.2 1.16	1.0 1.26	2.0 0.00	5.0 0.00	5.0 2.00	2.0 2.00	2.6 .82	2.6 1.38
13. Avail. of sponsor guidance	\bar{x} 3.20 SD 1.22	4.3 .58	3.5 .58	4.7 .58	4.3 .58	2.8 .96	2.5 .58	2.5 .71	5.0 0.00	3.0 0.00	2.0 0.00	4.0 1.00	3.42 1.43
14. Sponsor feedback to teacher	\bar{x} 2.8 SD 1.64	3.7 1.16	3.0 .82	3.7 1.52	4.33 .58	2.8 .96	2.2 .82	2.0 0.00	5.0 0.00	3.0 0.00	2.0 0.00	4.7 .58	3.2 1.31
15. Rapport be- tween admin. SD staff	\bar{x} 3.2 SD 1.50	4.0 1.00	4.0 .82	4.0 0.00	3.7 1.16	3.0 1.41	2.8 .96	4.0 0.00	5.0 0.00	5.0 0.00	3.0 0.00	2.8 1.26	3.5 1.21
16. Rapport be- tween PV staff & child	\bar{x} 4.4 SD .55	4.7 .58	3.8 1.26	4.0 1.11	3.3 1.53	3.5 1.73	3.8 .96	3.0 0.00	5.0 0.00	5.0 0.00	4.0 0.00	4.2 .96	3.9 1.03
17. Rapport be- tween spon- SD sor staff & local staff	\bar{x} 3.6 SD .89	4.0 1.00	3.5 .58	3.3 1.16	4.3 1.16	3.0 1.41	3.5 .71	5.0 0.00	5.0 0.00	4.0 0.00	4.7 .58	3.7 1.15	
18. Training effectiveness for teacher	\bar{x} 3.4 SD 1.67	3.0 1.00	2.5 1.00	2.0 .58	2.7 0.96	3.8 1.29	3.5 2.12	2.0 0.00	5.0 0.00	2.0 0.00	2.0 1.00	2.88 1.54	
19. Training effectiveness for teacher	\bar{x} 3.4 SD 1.82	2.7 .58	3.2 1.26	1.5 .71	2.7 .58	3.8 1.26	3.0 .82	3.5 2.12	1.0 0.00	3.0 0.00	2.0 0.00	2.57 1.55	

TABLE D-7

Sponsor Implementation Report
Means and Standard Deviations

SI#3	Site Assessment	Pittsburgh				TOTAL
		West Bank	St. Louis	Kansas City	NYC	
a. Turnover rate of teachers	1.5 .50	1.8 1.30	3.0 1.0	2.3 1.89	3.8 1.64	2.0 0.0
b. Turnover rate of aides	2.2 1.30	1.0 0.0	3.5 1.50	2.3 0.94	1.8 1.30	2.0 0.0
c. Turnover rate of children	5.5 .87	1.8 .83	2.0 0.0	1.7 .94	3.0 0.0	2.0 0.0
d. Intra-staff friction	2.5 1.12	4.0 .71	2.0 0.0	2.3 1.94	2.8 1.30	2.0 0.0
e. Regular attendance of teachers	4.2 .43	4.2 1.30	2.0 0.0	2.3 .94	0.0 0.0	5.0 0.0
f. Punctuality of teachers	4.2 .43	4.2 1.30	2.5 1.50	0.0 0.0	5.0 0.0	3.0 0.0
g. Regular attendance of children	3.0 .71	4.0 1.22	3.5 .50	3.7 .94	3.0 .00	4.0 .00
h. Support of local HS personnel for the model	4.2 .83	3.5 .87	3.0 1.00	3.7 .94	2.7 1.09	4.0 .00
i. Support of PAC for the model	4.0 1.22	3.0 1.22	4.5 .50	3.7 .94	4.0 .71	5.0 .00
j. Support of the community for model	4.5 .59	3.0 1.58	4.5 .50	3.7 .94	3.8 .43	5.0 .00
k. Adequacy of physical plant - indoors	4.0 .71	3.2 .43	2.5 1.50	3.0 1.63	1.7 .47	4.0 .00

k. Adequacy of physical plant - outdoors	2.8 1.22	3.0 1.78	2.5 7.1	2.3 1.50	1.7 .94	2.0 .47	2.0 .00	1.0 .00	2.4 .00
l. Availability of sponsor guidance	3.5 1.50	4.2 .83	3.5 .50	4.3 .94	2.2 1.09	4.0 .00	4.0 .00	3.0 .00	3.5 1.24
m. Sponsor feedback to the teacher	3.0 1.22	5.0 .00	4.0 .00	4.3 .94	2.2 1.09	3.0 .00	3.0 .00	5.0 .00	3.6 1.31
n. Rapport between administrator & staff	3.5 .50	3.5 .50	4.0 .00	3.0 1.63	2.2 .83	3.0 .00	5.0 .00	2.0 .00	3.2 1.08
o. Rapport between PV staff & children	4.2 .43	4.0 .71	4.5 .50	3.0 .00	3.5 .87	4.0 .00	4.0 .00	3.0 .00	3.8 .75
p. Rapport between sponsor staff and local Head Start staff	4.2 .43	4.0 .71	4.0 1.00	4.3 .94	3.5 1.12	4.0 .00	3.0 .00	5.0 .00	4.0 .89

SI#4a

Pre-service Training:

Number of hours for teachers	29 11.97	26 7.50	60 20.00	24 4.90	40 .00	60 .00	24 .00	60 .00
Number of hours for aides	29 11.97	23 10.50	60 20.00	24 4.90	40 .00	30 .00	24 .00	60 .00
Number of days for teachers	4 1.12	7 5.3	8 2.5	4 .94	5 .00	10 .00	5 .00	10 .00
Number of days for aides	4 1.12	4 0.00	8 2.5	4 .94	5 .00	5 .00	5 .00	10 .00

In-service Training:

Number of hours for teachers	73 16.33	317 62.09	60 30.00	178 27.86	46 19.49	222 .00	84 .00	192 .00
Number of hours for aides	73 16.33	263 42.43	60 30.00	178 27.86	46 19.49	74 .00	84 .00	192 .00
Number of days for teachers	26 10.45	45 8.87	30 .00	30 4.64	9 3.90	37 .00	18 .00	32 .00
Number of days for aides	26 10.45	38 5.06	30 .30	30 .64	9 3.90	14 .00	18 .00	32 .00
Frequency of training (6=daily)	4.5 .87	3.0 .00	5.0 .00	3.0 .00	3.0 .00	4 .00	3 .00	3 .00
Who gave training? (1=sponsor, 2=local)	2 .00	1 .00	1 .00	1 .00	1 .00	1 .00	1 .00	1 .00

Note: Site means are not included because there is only one observation per site.

Enabler model is not included here because the Enabler consultants were not asked to complete the Sponsor Implementation Report.

Appendix E

FACTOR ANALYSIS OF THE SITE ASSESSMENT

The site assessments which were completed by the sponsors and the OCD consultants provide interesting information about a number of aspects of the Planned Variation sites. In Chapter 3, we discussed the variables included in the site assessments individually. While this discussion is important, it also has limitations. One such limitation is that it is difficult to deal with a large number of variables at once. If we are trying, for example, to consider the total context of any one site, working with many separate variables is conceptually unmanageable. A second limitation in dealing with individual variables is that we do not know how they are related; we do not know whether each is conceptually unique or part of a more common dimension. In an attempt to counter both of these limitations we performed a factor analysis on the site assessments. On the positive side, the site assessments are amenable to a factor analysis because all ratings were done at the same time and in the same manner, making them a consistent body of data. We chose to do the factor analysis on the consultants', rather than on the sponsors' ratings because there are data for 34 sites from the consultants but for only 20 sites from the sponsors.

Basically, factor analysis is a technique which reduces a large number of operational indices to a small number of conceptual variables. In using a factor analysis, we are assuming that if we have a large number of variables which are intercorrelated, these interrelationships may be due to the presence of one or more underlying factors which are related to the variables in varying degrees. If we can identify a small number of factors which account for a large proportion of the variance, we can work with these instead of the variables.

In this appendix, we will first elaborate on the methodology used in a factor analysis. Second, we will define the factors which emerge from the analysis. Third, we will discuss where the Planned Variation sites fall on the factors.

Methodology¹

The first step in the factor analysis is to inter-correlate the 19 variables and subject them to a principal

¹ See Modern Factor Analysis by Harry Harman; for a description of these procedures.

components analysis². The goal of a principal components analysis is to define the multidimensional space which accounts for the most variance among all variables, or, in non-geometric terms, to find the set of loadings which maximizes the correlation between the original variables and the factors. The components analysis resulted in five components with latent roots greater than 1.00 (which roughly means that more than one variable contributed to the factor). Table E-1 shows the latent roots and the percentages of variance explained individually and cumulatively by the five principal components. Note that these components account for 74.5% of the total variance. Although a large percentage of explained variance was expected because there are only 34 separate observations made on the variables, this figure exceeds these expectations. Thus, the variance among 19 variables is explained well by five factors.

The second step in the factor analysis is to rotate the components according to the Varimax criterion. The

² For four of the 19 variables, there was usable data from all 34 observations; for 12 of the variables there was usable data from 33 observations; for 3 of the variables usable data was available from 32 observations; 1 variable (effectiveness of sponsor training for parents) is not included in the analysis because there was data for only 21 out of 34 observations. There was 1 observation per site.

TABLE E-1

Principal Components Analysis

Latent roots and percentages of variance explained by five components which were later rotated.

<u>Component</u>	<u>Latent Root</u>	<u>Percentage of Variance Explained</u>	<u>Cumulative % of Variance Explained</u>
I	6.699	35.3%	35.3%
II	2.540	13.4%	48.6%
III	2.058	10.8%	59.5%
IV	1.522	8.0%	67.5%
V	1.339	7.0%	74.5%

purpose of rotation is to simplify interpretation by finding a set of factors for which any given factor will be highly correlated with some of the indices but uncorrelated with the rest. A rotation does not change the total percentage of variance explained by the factors; it simply clusters the variables in different ways. Table E-2 shows the loadings of each variable on each rotated factor. A loading can be viewed as the correlation between one variable and one factor. The cluster of variables which loads high on a factor are used to define or describe that factor. The following section is devoted to describing the five factors which resulted from the analysis of the site assessment.

The final step in the factor analysis is to compute factor scores on each of the five rotated factors for each of the 34 sites. Table E-3 shows the factor scores for each site. These will be discussed after the factors have been defined.

Factor I: Support of the site (community) for the model

The positive end of this factor is defined by strong support of personnel for the model (.88)³, strong support of PAC for the model (.88), support of the community for the model (.71), punctuality of teachers (.85), and regular

³ Numbers in parentheses are the factor loadings of a variable on the factor under discussion.

TABLE E-2

ROTATED FACTOR LOADINGS

VARIABLE	I	II	III	IV	V	COMMUNALITY
TEACHER TURNOVER RATE	-C. .213	-0.023	C. .661	0.140	-C. .073	0.812
AIDES TURNOVER RATE	(2)	-C. C48	C. 024*	0.909	C. 132	C. 561
CHILDREN TURNOVER RATE	(2)	-C. C68	0.206	0.226	C. 609	C. 454
INTRA-STAFF FRICITION	(4)	-C. C72	0.378	0.220	C. 565	C. 554
REG ATTENDANCE TEACHERS	(5)	C. -11	C. 177	C. C01	-C. 225	0.716
REG ATTENDANCE TEACHERS	(6)	C. 854	-C. 026	0.134	-C. 361	0.339
REG ATTENDANCE CHILDREN	(7)	C. 443	0.157	0.149	-C. 112	0.652
SUPPORT BY LOCAL FSP	(8)	C. 834	-C. 150	-0.195	-C. 149	0.341
SUPPORT OF PAC FOR MODEL	(9)	C. F90	-C. 167	-C. 211	-C. 374	0.654
SUPPORT OF COMMUNITY	(10)	C. 716	-0.439	-0.164	-C. 526	0.630
ACCURACY OF INSIDE PLANT	(11)	C. 421	-0.221	-C. C11	0.582	0.602
ACCURACY OUTSIDE PLANT	(12)	-C. 1C1	C. 11C	-C. 33C	C. 7C5	0.722
AVAIL. CF SPONSER GUIDE	(13)	C. 247	-C. 695	-C. 197	C. C27	0.637
SPONSOR FEEDBACK	(14)	0.157	-0.793	-0.103	-C. 132	0.644
QAD BET ADMIN + STAFF	(15)	C. 282	-0.162	-0.219	-C. 619	C. 573
QAD BET STAFF + CHILD	(16)	C. 561	-C. C37	0.220	-C. 535	0.617
QAD BET SPEC SCR + LFS	(17)	0.621	-C. 422	-0.218	-C. C12	C. 655
TEACHER TRAIN EFFECT	(18)	C. 127	0.810	-0.667	-C. 222	0.735
AIDES TRAIN EFFECT	(19)	-C. 13C	C. 682	-0.242	C. 125	0.686
(Latent Roots) SUM SCLARES;	4.612	3.118*	2.126	2.592	1.616	14.158
Percent of Variance Explained	25.3	16.4	11.2	13.6	7.9*	
Cumulative Percent of Variance Explained	25.3	41.7	52.9	66.6	74.5	

TABLE E-3

RATED FACTOR SCORES

sites	I	II	III	IV	V	SUM SQUARES
0204	C. 578	-1.221	-C.095	0.036	0.358	2.572
0205	-1.275	2. C55	-1.174	-0.225	C. 553	8.264
0209	C. 521	-1.554	0.408	-0.587	1.784	6.241
0212	1.025	1.144	C.273	0.668	0.417	3.272
0208	0.117	0.112	-C.672	-0.865	-0.286	C. 930
0308	C.792	-C.850	-0.746	-1.458	0.428	4.070
0305	C.511	C. C6C	1.607	C.165	1.072	4.025
0316	0.241	C.6CC	-C.511	-1.728	1.245	5.367
0501	-C.606	C.446	-1.257	-0.508	0.618	2.400
0510	-1.684	-1.295	-C.430	C.795	C.801	5.645
0511	-C.021	C.637	-0.111	-0.124	-0.992	1.392
0512	-C.561	C.148	2.268	-2.224	0.679	11.079
07C3	-1.714	-1.249	1.949	C.111	-1.765	11.475
0711	C.673	-1.686	-0.625	C.306	0.641	6.178
0714	-C.52C	-C.595	C.526	C.13C	-0.243	2.254
08C2	C.517	-0.422	-C.634	-1.714	-2.192	3.712
08C4	1.349	-0.577	0.804	1.845	C.739	6.760
C&CE	C.455	-0. C25	-1.144	-1.033	-1.542	4.168
09C2	C.410	0.855	-0.123	-C.09C	-0.465	1.173
09C4	-2.428	0.261	-1.465	0.646	0.327	4.464
09C6	C.557	1.42C	C.673	1.632	-0.476	6.274
091C	-0.067	0.455	2.370	C.261	0.230	5.654
1001	-C.515	C.533	0.081	0.393	1.111	1.943
1002	1.166	1.374	C.034	1.321	-1.376	7.349
1007	-C.887	4.CC6	1.339	C.882	-0.227	4.424
101G	-C.521	-C. CCC	C.666	-C.498	0.5C8	1.220
110E	C.641	1.221	-C.341	C.465	-1.453	5.336
11C8	C.4C3	-1.551	-C.6C6	-C.55C	-0.529	4.143
12C2	C.6C6	C.268	-C.61C	-1.31C	1.755	5.933
2001	C.3C0	0.272	C.649	-C.155	0.3C8	C.511
26C1	-C.327	-0.322	-C.680	1.184	0.781	2.229
27C1	C.147	-1.292	-1.583	1.445	C.916	7.120
27C2	C.763	-1.247	-0.169	C.207	-0.984	2.950
27C4	1.661	-0.675	0.2C6	1.519	0.169	5.590

(+: high (-: low (+: high (-: poor (+: good
support) support) turnover) atmosphere) facilities)

attendance of teachers (.81). This factor seems to be tapping a general measure of favorability toward model implementation within a site. The correlation of regular attendance and punctuality with the factor suggests, however, that favorability must be defined as more than mere liking for the model. The factor also seems to involve an efficiency of center operation. No variables fall at the other extreme of this factor, but we expect that it would be best described as an unfavorable situation for model implementation. In comparison to the other factors described here, this factor has the largest number of contributing variables and accounts for the greatest percentage of variance explained.

Factor II: Lack of sponsor support to the Center.

Low training effectiveness for teachers (.81) and aides (.68) load high on one end of this factor; while frequent sponsor feedback to the teacher (-.79) and availability of sponsor guidance (-.69) define the other end. This factor can be described, then, as a measure of the amount of support and assistance a program sponsor gives to the local projects working with his model.

Factor III: Staff instability

Only two variables have high loadings on Factor III: high teacher turnover (.86) and high aide turnover (.91).

Clearly, this factor is reflecting only the stability of the staff. Not only are there only two variables included in this factor, but those variables do not load high on other factors.

Factor IV: Overall atmosphere of the Center

One end of this factor is defined by a high degree of intra-staff friction (.70) together with a high turnover rate of children (.61). Good rapport between the administration and staff (-.62), good rapport between the staff and the children (-.59), and regular attendance of children (-.77) determine the other end of Factor IV. This factor seems to be tapping the atmosphere of the site, with one end representing a pleasant, stable place to be and the other end representing an unpleasant, divisive situation.

Factor V: Adequacy of physical facilities

This is another clearly defined factor with only two variables having high loadings: adequacy of physical plant inside (.75) and adequacy of physical plant outside (.71).

Relations Between Factors:

In addition to defining each factor separately, it increases our understanding of the factors to view them in

combination; to see, for example, which variables have high factor loadings on only one factor and which have high loadings on more than one. In this analysis, no variable loads on more than two factors.

Two variables load fairly high on Factor I and moderately on Factor II: support of the community for the model (I: .63, II: -.44) and rapport between the sponsor staff and the local Head Start staff (I: .63, II: -.42). Interpretation of these loadings, should be based on an integration of the meaning of the two original factors. Rapport between sponsor staff and local staff is easily understood in this context. It seems to contain an indication of both the amount of support a sponsor gives to a site and the favorability of the site for the model. Support of the community for the model also fits easily into our conception of Factor I. Its loading in Factor II is more difficult to explain, unless we propose that the community's reaction to the model depends upon sponsor performance (more than do staff and PAC support, which are neutral on Factor II).

Two other variables are important to both Factors I and IV. Rapport between staff and children, as one might predict, is moderately related to the atmosphere of the site (IV: -.59) as well as to the support of the site for the model (I: .56). Regular attendance of children is most

important to Factor IV, atmosphere (.77), but it is also moderately related to the site support factor (.44). This probably reflects the efficiency of operation dimension of this factor.

One variable, adequacy of the physical plant inside, loads moderately high on Factor I (.42) and high on Factor V (.75). The interpretation of the variable in relation to Factor V, adequacy of plant, is clear since the variable is one of the two which define that variable. In relation to Factor I, this variable supports the belief that the factor is a general indicator of favorability of the model.

Finally, the intra-staff friction variable not only loads strongly on Factor IV (.70), but it also is moderately important on Factor II (.53), lack of sponsor support of the site. This makes sense since lack of sponsor support might well lead to intra-staff friction.

Factor Scores:

After the factors have been identified and described, they can be used to describe the site's from which the data were gathered. By multiplying the factor loadings by the standardized rating a site received on the corresponding variable and summing those products, we obtain a factor score which tells us where a site falls on the factor. If, for

example, a site rates high on those variables which are important in the factor being considered, the site will have a high factor loading, and will be at one of the extremes of the factor. Sites which do not fall at an extreme can be considered to be neutral on that particular factor.

For the most part, we will limit the following discussion to a consideration of those sites which have factor scores in the extreme quartiles of the distributions; with factor scores above .75, in either a positive or a negative direction (see Table E-3).

Far West (Model 02): The important factor for this model is sponsor support, because three of the four sites in this model reflect a significant lack of support. The fourth site, Salt Lake (02,09) shows strong positive sponsor support. (Many of the other models show no strong patterns on this factor.) One interpretation of this finding is that the sponsor has invested his main implementation efforts in one site, to the neglect of the others. We have no direct evidence to explain why one site received differential treatment. The only other factor on which Salt Lake is strong is adequate facilities. This finding alone does not seem to explain the differential sponsor support because Duluth is also moderately strong on adequate facilities, but is weak on sponsor support.

The other significant findings within this model are for Fresno (02.05). Although this site falls in the extreme positive quartile on adequacy of facilities and stability of staff, it also loads high on both lack of site support for the model and sponsor support. Thus, we might conclude that in spite of good facilities and a stable staff, the situation in Fresno would inhibit rather than facilitate model implementation.

Arizona (03): Most of the significant findings in this model are for Lakewood (03.09). This site falls in the extreme positive quartile on four of the factors. This means that the site has a fairly stable staff, a good atmosphere, is supportive of the model, and moreover, receives a fairly large amount of support from the sponsor. The only other significant findings are that Lincoln (03.16) has good facilities but high staff turnover.

Bank Street (05): The factor scores in this model are fairly large; moreover, they reveal a wide range of relationships among sites. Three of the four sites show significant scores on Factor V; two of the sites, Boulder (5.01) and Wilmington (05.11), are in the extreme positive quartile of adequacy of facilities while the third site, Elmira (05.12) falls in the extreme negative quartile of this factor. In

addition to having good facilities, Wilmington is also characterized by very strong sponsor support, while the other sites are slightly negative on this factor (this is not significant according to our quartile criterion). Interestingly, Wilmington is also the only site in this model to have an extreme score on the support of site for the model factor. Since that score is negative and since this site reports a moderately poor atmosphere, we can speculate that the sponsor is investing the most effort in a difficult site. The other finding within this model is that Boulder has a very positive atmosphere.

Oregon (07): As in Bank Street, the sites in this model have high scores on each factor and show a wide range of relationships. Perhaps the most significant finding is that two of the three sites report strong support from the sponsor (the third is neutral on this factor). One of the sites with strong sponsor support, E. Las Vegas (07.14), is essentially neutral on the other factors except that it has moderately good facilities. The second site with strong sponsor support, Tupelo (07.11) is also characterized by high turnover, poor facilities, and lack of support by the site for the model. As with Wilmington, this appears to be a situation of a sponsor working hard to compensate for a difficult situation. The third site, E. St. Louis (07.03), which

is neutral on sponsor support, also has a high turnover rate and poor facilities, but a very strong positive atmosphere.

It is essentially neutral on support of the site for the model.

Kansas (08): Again, the range of relationships in this model is wide. First, we can see that although all three sites fall on the positive end of the sponsor support factor, only Oraibi (08.02) is in the top quartile. Oraibi, however, also is significantly negative on the factor indicating support of the site for the model, suggesting that this is another instance of the sponsor attempting to compensate for an unfavorable situation. Mounds (08.08) also falls in an extreme quartile of support of the site for the model. But unlike Oraibi, it falls on the positive end. Mounds is also characterized by an extremely negative atmosphere, and a high turnover rate. Together these findings suggest that this site may be efficient and favorable toward the model, but it is not a pleasant place for either the staff or the children. Finally, Portageville (09.04) is characterized by very positive atmosphere and poor facilities. However, it does not show a strong relationship to other factors.

High Scope (09): One consistent finding in this model is that all sites tend to have stable staffs. Two sites, Fort Walton Beach (09.02) and Greeley (09.06) are significant

on this factor. Another finding is that the two other sites, Central Ozarks (09.04) and Seattle (09.10), are low on sponsor support. The most significant finding, however, is that Greeley is extremely negative on site support for the model. From this finding we would suspect that even though the site has low turnover and is not strong on the rest of the factors, the implementation of the model would be difficult. Seattle is of interest because it falls in the extreme quartile on three factors and is fairly high on a fourth. While, on one hand, it is characterized by fairly strong site support for the model (and tends to have a stable staff), it also has an unpleasant atmosphere and weak support from the sponsor. Finally, Fort Walton Beach, in addition to having low staff turnover, has a good atmosphere, but poor facilities.

Florida (10): The most interesting finding about this model is that three sites cluster on three of the five factors, while a fourth (Chattanooga: 10.07) is very different. Within the cluster, only Houston (10.10) has extreme factor scores. It can be described as being unfavorable toward the model, having a poor atmosphere, and receiving weak support from the sponsor. Since it also has high turnover, we might conclude that implementation of the model in

this site would be difficult. Chattanooga, the site outside the cluster, is also characterized by a poor atmosphere and weak support from the sponsor, as well as poor facilities; but unlike the other sites, it strongly supports the model. Perhaps, here, implementation might be slightly more successful. The only findings for the other two sites are that Jacksonville (10.01) has very high turnover, while Jonesboro (10.02) reports having good facilities.

EDC (11): There is only information for two sites in this model, and for these there are only two significant findings: Johnston Co. (11.08) has poor facilities and receives little support from the sponsor.

Pittsburgh (12), REC (20, NYU (26): Each of these models works with only one Head Start site. The NYU site, St. Thomas (26.01), is essentially neutral on all five factors. Lock Haven (12.03), the Pittsburgh site, is significant only on receiving positive sponsor support, and on having moderately low turnover. Kansas City (20.01), in contrast, has strong support of the community for the model, a positive atmosphere and good facilities, but is neutral on sponsor support.

Enablers (27): The most common finding for this model is that all sites tend to have negative atmospheres; three of the four sites (Colorado Springs: 27.05, Newburgh: 27.02, Puerto Rico: 27.01) fall in the extreme quartile of this factor. Considering the nature of the Enabler model, it is possible that this results from a relatively high level of staff friction, which can be seen as the constructive working through of ideas. Another aspect of the model is that these consultants work more closely with the site than do the other consultants. As a result, they may have a better knowledge of the difficulties of a site, even though the actual levels are not different from other sites. In addition to having a negative atmosphere, Newburgh has a stable staff and good facilities and receives strong support from the consultant sponsor; Puerto Rico has good facilities and Colorado Springs is very supportive of the model. Billings (27.04) falls in the extreme positive quartile of sponsor support as well as being significantly favorable to the model; but, unlike the other sites, is neutral on the atmosphere factor.

Summary

The factor analysis appears to be a good tool for increasing our understanding of the context of the Planned Variation sites. Not only do the five resulting factors

explain a large proportion of the variance from 19 items, but they are easily interpretable. Moreover, they are consistent with, though not identical to, the issues we have raised in the earlier parts of the paper. One difference is that staff turnover and adequacy of facilities appear as separate factors here, and thus, seem to have more weight in this analysis than in the previous discussion. We suspect, however, that this is a result of the nature of the items making up the factors, rather than to their importance; because they are more easily observable than some of the other items, they can be judged more exactly.

The most striking finding about models to be drawn from this analysis is the large variation within them. In most cases, models have a wide range of scores on all factors. This finding serves to underline our contention that the process of implementation is complex. Sponsors cannot simply 'export' their model to uniform situations. Instead, they must deal with a variety of situations. We propose that these context issues cannot be ignored in considering model implementation.

Appendix F. List of fifty-one classroom observation variables.

1. Activity A: snack, lunch, any eating activity
2. Activity B: group time: story-reading, singing, TV, record-playing, dancing, usually entire class in one group
3. Activity C: academic activities: numbers, alphabet, reading, language development (with or without curriculum materials).
4. Activity D: inquiry activities: finding out about people and how they live; finding out about the natural world (magnets, shapes, sound)
5. Activity E: table games, guessing games, working puzzles
6. Activity F: arts and crafts and domestic activities: cooking, sewing, pounding or sawing
7. Activity G: blocks, trucks, dolls, dress-up, water play
8. Adults with children in academic activities
9. Academic activities (frequency of occurrence)
10. Independent child activity (child observed as alone in any activity)
11. Wide variety of activities
12. Adult interactions with one or two children
13. Aide's participation in academic activities
14. Adult informing children symbolically (adult teaching with pictures, letters, numerals, etc.)
15. Adult direct questioning of child (questions to which there is a definite expected response either verbal or non-verbal, e.g., "Will you bring the water pitcher here?"; "What do 3 and 1 make?")
16. Child response to adult direct question (verbal or non-verbal; right or wrong)
17. Adult praise and corrective feedback (guide to alternative, reason, control by praising, question--includes any accompanying expressions of emotion)

18. Adult feedback to child response (variable 16 followed immediately by variable 17)
19. Adult informing children (teaching, explaining, instructing)
20. Adult asking "thought" questions (questions to which there is no particular expected response, no right or wrong answer)
21. Adult informing child with concrete objects (concrete objects being any tangible, real object such as blocks, Cuisenaire rods, scales, clay, etc.)
22. Adult acknowledgement to child (includes any accompanying emotions)
23. Child self-learning with concrete objects (e.g., child alone working out math problem with scales or Cuisenaire rods; includes play as well as "work")
24. Child self-learning (child teaching or informing himself either with or without "machine" such as language master or typewriter; does not include code for comment, play)
25. Child teaching another child (child informing or explaining to another child)
26. Child self-learning with symbols (child alone "learning" with paper and pencil, numerals, letters, workbooks, etc.)
27. Child asking questions (includes all kinds of questions, requests in the form of questions)
28. Child self-expression (comment, play, show-and-tell)
29. Adult communication focus: one child
30. Adult communication focus: small group
31. Adult communication focus: large group
32. Adult *praisé*/acknowledgement of children (adult complimenting or commenting more or less favorably on child's behavior)
33. Adult "positive" corrective feedback (adult attempting to alter child's (or group's) behavior by guiding to alternative activity, giving a reason why behavior is unacceptable, controlling by praise of other children, or questioning child as to his behavior)

34. Adult "negative" corrective feedback (adult attempting to alter child's (or group's) behavior by firmness, demeaning, threatening or punishing in a sad, negative, or angry manner)
35. Adult "negative" behavior (adult doing anything in a sad, negative, angry, firm, demeaning, threatening or punishing manner)
36. Child "negative" behavior (same as variable 35)
37. Negative behavior (variable 35 + variable 36)
38. Adult positive affect toward children (adult communicating to child in happy manner)
39. Child positive affect toward adults
40. All positive affect (all evidence of "happiness")
41. Child positive affect

(Variables 42 through 51 are derivations of variables 1 through 41)

42. Independent children in academic activities (variable 9 minus variable 8)
43. Teachers and volunteers with children in academic activities (variable 8 minus variable 13)
44. Independent children in non-academic activities (variable 8 minus variable 13)
45. Adult informing children other than symbolically or with concrete objects (variable 19 minus variables 14 and 21)
46. Adult praise of children (variable 32 minus variable 22)
47. Adult corrective feedback (either variable 17 minus variable 46 or variable 33 plus variable 34)
48. Adult negative behavior other than corrective feedback (variable 35 minus variable 34)
49. Child positive affect to other children (variable 41 minus variable 39)
50. Child informing self other than symbolically (variable 24 minus variable 26)
51. Adult positive affect to other adults (variable 40 minus variables 41 and 38)

APPENDIX G.

Appendix G includes tables of Means and Standard Deviations for eleven models on the fifty-one Classroom Observation variables for fall and spring, 1970-1971.

		ANS.	ST	ARD	IAT	FC	EV1	DDE	N F	—O-	ARE	S:	U. OF	U. OF	U. OF	Pitts.	REC	Enab:
		CLASSROOM OBSERVATIONS, FALL, 1970																
		Far West		U. of Ariz.		Bank St.		U. of Oregon		U. of Kansas		Hi/Scope		Florida		EDC		
Var 1	N	8	8	11	7	12	12	12	12	7	8	8	4	4	4	4	4	12
0.164	M	0.161	0.134	0.089	0.046	0.109	0.242	0.233	0.163	0.271	0.180	0.223						
0.089	SD	0.036	0.048	0.074	0.030	0.042	0.062	0.038	0.090	0.044	0.028	0.085						
Var 2	N	8	8	11	7	12	12	12	12	7	8	8	4	4	4	4	4	12
0.249	M	0.180	0.313	0.292	0.088	0.255	0.308	0.311	0.220	0.288	0.248	0.214						
0.118	SD	0.099	0.099	0.131	0.111	0.067	0.096	0.132	0.073	0.064	0.068	0.102						
Var 3	N	8	8	11	7	12	12	12	12	7	8	8	4	4	4	4	4	12
0.136	M	0.099	0.093	0.037	0.520	0.277	0.039	0.092	0.070	0.090	0.205	0.071						
0.150	SD	0.071	0.045	0.046	0.116	0.065	0.066	0.070	0.045	0.056	0.059	0.088						
Var 4	N	8	8	11	7	12	12	12	12	7	8	8	4	4	4	4	4	12
0.076	M	0.103	0.112	0.053	0.139	0.052	0.065	0.096	0.058	0.035	0.096	0.061						
0.081	SD	0.090	0.072	0.044	0.159	0.049	0.061	0.099	0.047	0.038	0.094	0.048						
Var 5	N	8	8	11	7	12	12	12	12	7	8	8	4	4	4	4	4	12
0.064	M	0.092	0.063	0.052	0.027	0.083	0.070	0.060	0.075	0.076	0.067	0.045						
0.015	SD	0.055	0.049	0.048	0.036	0.041	0.048	0.041	0.032	0.030	0.022	0.031						

		U. of Far West	U. of Arizona	U. of Bank	U. of St.	U. of Oregon	U. of Kansas	Hi-Scone	Florida	Pitts.	REC	Enab.
Var .6	M											
0.138	M	0.185	0.149	0.239	0.111	0.088	0.068	0.095	0.133	0.094	0.080	0.189
0.087	SD	0.065.	0.095	0.064	0.098	0.033	0.042	0.038	0.122	0.074	0.023	0.060
Var .7	M											
0.116	M	0.116	0.110	0.184	0.032	0.091	0.110	0.082	0.124	0.087	0.124	0.161
0.072	SD	0.059	0.050	0.092	0.042	0.036	0.055	0.073	0.045	0.040	0.037	0.078
Var .8	M											
0.476	M	0.209	0.349	0.430	0.936	1.206	0.167	0.419	0.242	0.542	0.633	0.206
0.446	SD	0.143	0.173	0.416	0.231	0.415	0.120	0.419	0.188	0.172	0.300	0.175
Var .9	M											
0.634	M	0.506	0.484	1.029	0.969	1.220	0.207	0.468	0.323	0.807	0.757	0.305
0.540	SD	0.276	0.222	0.879	0.272	0.419	0.163	0.400	0.259	0.045	0.429	0.242
Var .10	M											
1.141	M	1.656	1.380	2.654	0.249	0.561	0.720	0.649	0.843	1.244	1.484	1.108
1.060	SD	1.128	0.506	1.926	0.297	0.385	0.316	0.266	0.410	0.525	0.420	0.396

Var 11														
2.112	M	2.605	1.987	3.836	1.413	2.019	1.791	1.553	1.647	1.835	2.050	1.860		
1.143	SD	0.602	0.237	2.344	0.480	0.433	0.389	0.258	0.675	0.408	0.390	0.415		
Var 12														
0.266	M	0.320	0.205	0.480	0.090	0.267	0.187	0.140	0.151	0.683	0.342	0.243		
0.252	SD	0.127	0.112	0.340	0.175	0.262	0.160	0.126	0.149	0.311	0.259	0.166		
Var 13														
0.201	M	0.059	0.097	0.154	0.242	0.791	0.032	0.170	0.087	0.148	0.252	0.061		
0.284	SD	0.057	0.077	0.229	0.213	0.284	0.038	0.146	0.056	0.045	0.207	0.060		
Var 14														
0.104	M	0.367	0.086	0.020	0.0	0.0	0.205	0.0	0.015	0.0	0.037	0.255		
0.359	SD	0.387	0.098	0.044	0.0	0.0	0.348	0.0	0.040	0.0	0.065	0.804		
Var 15														
6.125	M	2.782	4.808	3.248	13.359	8.415	7.094	5.208	5.969	8.091	8.674	3.523		
3.984	SD	1.189	1.383	1.622	5.038	3.679	2.015	2.053	4.735	1.248	0.929	2.058		

Var 16																			
	Far West	U. of Arizona	Bank St.	U. of Oregon	Kansas	Hi/Scone	Florida	U. of Pitts.	EDC	Pitts.	REC							Enab.	
4.774	M	2.092	3.097	2.507	12.360	.7.308	5.842	4.295	2.777	6.488	6.802	2.097							
3.753	SD	0.878	0.945	1.712	5.246	3.821	1.638	1.943	1.402	1.158	0.198	1.799							
Var 17																			
4.393	M	2.789	3.591	0.988	4.980	6.398	1	6.712	2.404	2.897	8.763	4.490	5.118						
2.522	SD	1.173	1.453	0.665	0.990	2.082		2.134	1.059	1.048	1.056	0.527	1.474						
Var 18																			
1.305	M	0.368	0.403	0.254	2.883	2.780		1.726	0.592	0.332	2.901	2.613	0.776						
1.268	SD	0.258	0.192	0.190	0.472	1.185		1.018	0.400	0.194	0.484	0.386	0.988						
Var 19																			
3.543	M	4.904	1.855	4.848	2.491	2.714		4.175	1.954	7.244	1.864	1.194	3.175						
3.103	SD	3.192	0.785	4.134	0.915	2.177		3.564	0.934	4.085	0.473	0.612	1.436						
Var 20																			
1.726	M	1.538	2.096	0.646	3.268	0.405		2.689	1.568	1.753	1.723	0.786	2.442						
1.425	SD	0.434	0.815	0.536	1.197	0.195		2.156	0.366	1.631	0.383	0.216	1.544						

	Fair West	U. of Arizona	Bank St.	U. of Kansas	Hi/Scope	U. of Florida	EDC	Pitts.	REC	Enab.
Var 21										
0.477	M	1.728	0.013	0.539	0.0	0.002	1.480	0.212	0.071	0.0
1.088	SD	0.903	0.035	0.845	0.0	0.007	2.186	0.234	0.111	0.0
Var 22										
1.263	M	0.684	1.097	0.241	0.592	1.355	2.581	0.357	0.694	1.822
1.699	SD	0.181	0.420	0.260	0.338	1.232	1.215	0.280	0.374	0.309
Var 23										
0.578	M	1.841	0.998	1.563	0.0	0.050	0.111	0.216	0.839	0.0
1.353	SD	2.311	1.328	2.314	0.0	0.097	0.141	0.491	1.177	0.0
Var 24										
0.457	M	0.232	0.660	1.319	0.0	0.070	0.170	0.078	2.076	0.0
1.188	SD	0.264	0.706	1.914	0.0	0.101	0.154	0.098	2.426	0.0
Var 25										
0.212	M	0.194	0.138	0.714	0.023	0.151	0.156	0.048	0.307	0.082
0.317	SD	0.199	0.114	0.556	0.030	0.207	0.101	0.050	0.334	0.050

		Far West	U. of Ariz.	Bank St.	U. of Oregon	Kansas	Hi/Scope	Florida	U. of EDC	Pitts.	REC	Enah.
Var 26												
0.051	M	0.017	0.294	0.006	0.0	0.004	0.012	0.232	0.181	0.0	0.0	0.026
0.198	SD	0.045	0.489	0.019	0.0	0.014	0.041	0.080	0.318	0.0	0.0	0.087
Var 27												
2.620	M	4.183	2.727	3.378	0.775	2.322	3.224	1.333	1.279	1.628	2.620	3.553
1.615	SD	2.663	0.657	1.563	0.523	0.861	1.420	0.625	0.621	0.346	0.263	1.237
Var 28												
12.008	M	16.885	15.012	14.268	4.501	11.304	8.103	16.739	6.533	11.361	13.260	14.356
6.357	SD	6.390	2.858	7.284	4.745	4.497	4.562	5.180	3.633	2.926	1.180	5.967
Var 29												
12.560	M	10.408	11.963	7.760	12.755	15.777	16.924	8.941	9.695	16.687	13.726	13.359
4.966	SD	4.790	2.394	5.617	1.547	3.509	3.333	3.661	5.193	0.750	1.700	4.197
Var 30												
3.277	M	2.339	2.016	1.233	12.840	3.569	2.088	2.706	3.890	3.377	1.941	2.275
3.592	SD	1.318	1.709	1.344	4.051	2.700	1.614	2.330	3.169	0.655	0.890	1.767

		Far West	U. of Ariz.	Bank St.	U. of Oregon	U. of Kansas	Hi/Scone	Florida	ENR	Pitts	REC	Enab
Var 31												
4.571	M	3.209	4.224	4.590	1.642	2.950	6.678	5.291	8.082	5.924	5.025	3.551
4.099	SD	2.003	3.497	4.045	2.119	1.959	3.464	2.820	7.970	1.504	4.234	2.928
Var 32												
2.803	M	1.374	1.627	0.539	4.206	4.496	4.401	1.410	1.570	6.902	3.149	2.659
1.898	SD	0.447	0.695	0.464	0.786	1.464	1.349	0.585	0.355	0.847	0.834	0.912
Var 33												
0.947	M	1.099	1.510	0.193	0.420	1.348	1.276	0.607	0.610	1.577	1.159	0.881
0.780	SD	0.707	0.774	0.248	0.514	0.706	0.946	0.308	0.515	0.471	0.473	0.726
Var 34												
0.254	M	0.164	0.380	0.006	0.288	0.134	0.575	0.348	0.412	0.079	0.052	0.199
0.378	SD	0.191	0.258	0.019	0.334	0.129	0.737	0.249	0.416	0.065	0.090	0.135
Var 35												
0.368	M	0.473	0.402	0.122	0.304	0.208	0.947	0.359	0.469	0.156	0.086	0.251
0.438	SD	0.485	0.264	0.235	0.352	0.149	0.662	0.270	0.431	0.095	0.097	0.171

Var 36															
0.556	M	1.304	0.583	0.406	0.108	0.332	0.780	0.221	0.629	0.325	0.483	0.691			
0.546	SD	0.857	0.443	0.587	0.112	0.193	0.291	0.096	0.605	0.189	0.219	0.496			
Var 37															
0.926	M	1.778	0.988	0.522	0.412	0.541	1.730	0.580	1.103	0.462	0.569	0.927			
-0.827	SD	1.331	0.683	0.643	0.448	0.269	0.723	0.322	0.879	0.222	0.237	0.567.			
Var 38															
0.647	M	0.349	0.145	1.235	0.072	0.254	2.630	0.200	0.129	0.820	0.151	0.097			
2.037	SD	0.272	0.180	1.752	0.103	0.528	4.831	0.170	0.143	0.534	0.131	0.11			
Var 39															
0.692	M	0.982	0.129	1.060	0.037	0.273	2.418	0.352	0.181	0.909	0.226	0.234			
1.462	SD	0.839	0.081	1.522	0.571	0.363	3.049	0.471	0.197	0.185	0.201	0.163			
Var 40															
3.217	M	4.222	1.362	4.188	0.226	5.304	8.163	2.288	1.005	2.191	0.850	0.751			
5.834	SD	3.395	1.117	5.405	0.309	3.715	12.781	1.877	0.711	0.630	0.363	0.289			

		U. of Ariz.	U. of Far West	U. of Bank St.	U. of Oregon	U. of Kansas	Hi/Scone	U. of Florida / EDC	Pitts.	REC	Enab.
Var 41											
1.901	M	3.673	0.548	2.406	0.112	3.539	3.826	1.022	0.692	1.262	0.558
2.862	SD	3.044	0.349	3.459	0.210	2.586	4.825	0.722	0.539	0.314	0.351
Var 42											
0.158	M	0.297	0.135	0.599	0.033	0.014	0.040	0.049	0.081	0.265	0.124
0.283	SD	0.239	0.156	0.541	0.042	0.027	0.062	0.032	0.100	0.187	0.141
Var 43											
0.275	M	0.150	0.252	0.276	0.694	0.415	0.135	0.249	0.155	0.394	0.380
0.228	SD	0.147	0.132	0.208	0.147	0.180	0.117	0.284	0.155	0.130	0.117
Var 44											
0.983	M	1.358	1.245	2.054	0.217	0.547	0.680	0.600	0.761	0.979	1.360
0.815	SD	0.904	0.535	1.414	0.263	0.369	0.302	0.247	0.346	0.390	0.357
Var 45											
2.962	M	2.809	1.756	4.289	2.491	2.712	2.490	1.742	7.158	1.864	1.094
2.780	SD	2.307	0.778	4.329	0.915	2.176	1.416	0.995	4.119	0.473	0.475

Var		Far West	U. of Arizona	Bank St.	U. of Oregon	Kansas	Hi/Scone	U. of Florida	Pitts.	REC	Enh.
Var 46	M	0.690	0.529	0.298	3.614	3.141	1.819	1.052	0.876	5.080	0.634
	SD	1.496	0.481	0.315	0.267	0.744	1.292	0.976	0.325	0.370	1.068
Var 47	M	2.100	3.061	0.690	1.366	3.257	4.892	1.352	2.021	3.683	3.855
	SD	1.963	0.771	1.269	0.505	1.139	1.736	2.426	0.795	1.285	0.715
Var 48	M	0.309	0.022	0.116	0.016	0.074	0.372	0.011	0.057	0.057	0.034
	SD	0.115	0.436	0.019	0.237	0.026	0.123	0.457	0.027	0.095	0.075
Var 49	M	2.691	0.418	1.346	0.075	3.266	1.409	0.670	0.512	0.353	0.332
	SD	1.896	2.261	0.286	2.088	0.141	2.707	2.011	0.613	0.419	0.162
Var 50	M	0.406	0.215	0.367	1.313	0.0	0.066	0.157	0.045	1.894	0.0
	SD	1.117	0.263	0.666	1.914	0.0	0.100	0.142	0.079	2.149	0.0

		U. of Arizona	U. of Bank St.	U. of Kansas	U. of Hi/Scooe	U. of Florida	Pitts REC	Enab.
Far West	Var 51							
0.670	M	0.200	0.670	0.548	0.042	1.510	1.706	0.065
1.518	SD	0.227	0.762	0.820	0.104	1.444	3.262	1.290
	Var							
	M							
	SD							
	Var							
	M							
	SD							
	Var							
	M							
	SD							
	Var							
	M							
	SD							

Table 2. TRANSIENT STANDARD DEVIATION FOR FIVE MODES OF VARIANTS:

SPRING, 1971

CLASSROOM OBSERVATIONS, SPRING, 1971

		Far West		Ariz.		Bank St.		St. Oregon		Kansas		Hi/Scope		Florida		EDC		Pitts.		REC		Enah.	
Var		8	8	11	11	8	12	12	12	7	7	12	12	4	4	4	4	11	11	11	11		
0.162	M	0.222	0.113	0.127	0.046	0.143	0.198	0.276	0.194	0.216	0.153	0.127											
0.092	SD	0.079	0.073	0.092	0.047	0.039	0.048	0.070	0.085	0.056	0.052	0.099											
Var 2																							
0.241	M	0.246	0.398	0.102	0.083	0.283	0.334	0.309	0.246	0.268	0.325	0.144											
0.146	SD	0.096	0.152	0.095	0.095	0.090	0.094	0.095	0.137	0.101	0.087	0.120											
Var 3																							
0.155	M	0.153	0.150	0.058	0.631	0.317	0.074	0.024	0.083	0.074	0.139	0.049											
0.200	SD	0.072	0.091	0.067	0.290	0.091	0.093	0.032	0.088	0.040	0.060	0.066											
Var 4																							
0.052	M	0.041	0.064	0.060	0.056	0.032	0.033	0.034	0.073	0.048	0.099	0.061											
0.068	SD	0.091	0.074	0.085	0.070	0.041	0.031	0.056	0.047	0.058	0.104	0.070											
Var 5																							
0.051	M	0.064	0.045	0.060	0.034	0.047	0.068	0.096	0.025	0.024	0.088	0.054											
0.058	SD	0.051	0.046	0.058	0.046	0.038	0.067	0.085	0.041	0.041	0.057	0.057											

Var 6												
0.101	M	0.116	0.107	0.141	0.054	0.061	0.131	0.129	0.089	0.125	0.109	0.078
0.081	SD	0.093	0.091	0.113	0.066	0.040	0.081	0.084	0.052	0.020	0.022	0.076
Var 7												
0.081	M	0.095	0.073	0.146	0.041	0.056	0.081	0.083	0.067	0.089	0.075	0.081
0.074	SD	0.068	0.036	0.114	0.050	0.044	0.056	0.046	0.071	0.026	0.046	0.098
Var 8												
0.483	M	0.228	0.471	0.402	1.126	1.124	0.174	0.117	0.301	0.649	0.482	0.295
0.432	SD	0.098	0.236	0.338	0.173	0.436	0.249	0.110	0.217	0.168	0.216	0.171
Var 9												
0.665	M	0.425	0.717	0.785	1.194	1.164	0.225	0.197	0.458	1.527	0.749	0.412
0.500	SD	0.217	0.299	0.581	0.192	0.399	0.236	0.190	0.281	0.395	0.323	0.182
Var 10												
1.296	M	1.461	1.264	2.450	0.677	0.550	0.998	0.922	1.138	2.454	1.532	1.536
0.979	SD	0.544	0.493	1.211	0.527	0.314	0.799	0.563	0.778	1.105	0.513	1.116

		Far West	U. of Arizona	Bank St., Oregon	U. of Kansas	U. of Hi./Scone	Florida	FNC	Pitts.	REC	Enab.
Var 11											
2.154	M	2.361	1.915	3.786	1.897	1.615	1.935	1.559	1.758	2.658	2.180
0.964	SD	0.417	0.290	1.377	0.767	0.294	0.463	0.254	0.652	0.630	0.476
Var 12											
0.340	M	0.362	0.212	0.936	0.102	0.081	0.307	0.208	0.278	0.968	0.429
0.421	SD	0.170	0.139	0.691	0.089	0.082	0.394	0.236	0.166	0.398	0.342
Var 13											
0.204	M	0.087	0.195	0.111	0.378	0.776	0.068	0.046	0.093	0.207	0.021
0.306	SD	0.091	0.105	0.157	0.376	0.387	0.132	0.061	0.078	0.129	0.036
Var 14											
0.377	M	0.222	0.313	0.362	1.794	0.300	0.021	0.299	0.051	0.015	0.352
0.747	SD	0.330	0.303	0.712	1.379	0.390	0.069	0.455	0.081	0.025	0.307
Var 15											
5.673	M	2.664	4.454	3.435	10.894	7.606	4.349	4.266	6.104	4.569	7.611
3.248	SD	0.803	1.498	2.145	3.585	3.214	2.625	2.456	2.516	1.362	1.880

		Far West	U. of Ariz.	Bank ST.	U. of Oregon	Kansas	Hi/Scone	U. of Florida	U. of Pitts.	RFC	Enab.
Var 16											
4.436	M	2.208	3.457	2.652	9.712	.6.255	3.191	3.582	4.019	3.385	6.201
2.921	SD	0.588	1.216	1.542	3.278	3.770	2.207	1.973	1.628	0.980	1.548
Var 17											
5.858	M	1.545	2.878	1.689	6.833	5.868	2.874	2.397	3.421	6.730	5.152
2.521	SD	0.597	1.533	1.681	1.884	1.481	0.949	0.963	1.393	1.138	1.511
Var 18											
1.270	M	0.250	0.347	0.327	4.348	2.394	0.501	0.633	0.584	1.349	2.472
1.482	SD	0.190	0.211	0.469	1.719	1.577	0.434	0.353	0.363	0.516	0.818
Var 19											
2.923	M	2.676	1.721	3.697	7.485	2.140	2.963	1.405	2.704	1.968	1.318
2.436	SD	1.692	0.375	2.813	2.944	1.655	1.824	0.566	2.421	0.932	0.508
Var 20											
0.985	M	0.697	1.764	0.452	0.133	0.397	1.671	0.983	1.480	2.462	1.670
1.001	SD	0.666	1.338	0.704	0.225	0.281	0.839	0.279	1.207	0.478	0.651

Var 21														
0.189	M	0.120	0.105	0.0	1.449	0.057	0.0	0.0	0.078	0.083	0.104	0.233		
0.690	SD	0.166	0.118	0.0	1.897	0.148	0.0	0.0	0.087	0.096	0.457	0.454		
Var 22														
1.179	M	0.628	0.984	0.452	2.076	1.007	0.993	0.648	0.876	1.985	3.207	1.825		
1.012	SD	0.344	0.605	0.481	1.316	0.587	0.517	0.409	0.711	0.237	0.791	1.321		
Var 23														
0.910	M	2.914	1.511	1.156	0.552	1.005	0.052	0.603	0.484	1.494	1.564	0.071		
1.502	SD	3.043	1.487	1.627	0.933	1.168	0.103	0.801	0.786	0.569	0.696	0.111		
Var 24														
0.204	M	0.043	0.302	0.004	0.388	0.303	0.025	0.0	0.070	2.271	0.011	0.0		
0.554	SD	0.071	0.260	0.014	0.525	0.321	0.032	0.0	0.151	1.199	0.020	0.0		
Var 25														
0.100	M	0.105	0.138	0.138	0.069	0.102	0.084	0.197	0.021	0.326	0.0	0.049		
0.151	SD	0.142	0.153	0.236	0.076	0.154	0.101	0.134	0.047	0.182	0.0	0.166		

		U. of Ariz.	U. of Far West	Bank St.	U. of Oregon	Kansas	Hi/Scope Florida	PDC	Pitts.	RBC	Enah.
Var 26											
0.085	M	0.0	0.105	0.0	0.319	0.161	0.0	0.0	0.011	0.695	0.011
0.264	SD	0.0	0.106	0.0	0.524	0.186	0.0	0.0	0.038	0.638	0.020
Var 27											
1.800	M	1.650	1.706	1.851	0.946	1.789	1.546	1.954	1.668	2.252	2.632
0.966	SD	0.509	0.311	1.027	0.553	0.713	0.900	0.945	0.833	0.709	0.357
Var 28											
14.368	M	17.323	17.857	17.040	7.332	10.895	12.497	21.239	13.271	14.802	11.941
7.000	SD	5.722	3.174	8.764	6.311	4.247	4.117	7.556	6.037	1.296	3.115
Var 29											
10.798	M	9.590	9.841	8.255	10.519	15.763	10.797	7.321	10.112	12.778	14.224
4.768	SD	2.335	2.179	7.087	1.551	3.453	5.523	2.658	3.546	1.490	3.123
Var 30											
5.785	M	3.202	2.252	1.732	17.131	1.890	2.326	2.554	3.421	2.835	2.234
4.968	SD	1.298	1.020	1.528	8.128	0.641	2.280	2.481	1.644	0.914	0.839

Var 31													
3.977	M	4.291	3.814	3.225	1.073	2.956	5.676	3.626	5.671	5.340	5.222	3.417	
3.028	SD	3.092	1.848	3.228	1.207	1.595	2.892	1.912	1.672	1.550	1.154	2.173	
Var 32													
2.428	M	1.164	1.536	0.762	4.213	3.622	2.006	1.154	1.875	5.870	3.802	3.181	
1.746	SD	0.466	0.823	0.755	1.428	1.435	0.763	0.475	0.764	0.787	0.883	2.121	
Var 33													
0.759	M	0.282	1.216	0.415	0.195	1.507	0.286	0.855	0.513	0.510	1.272	1.336	
0.848	SD	0.240	0.903	0.537	0.179	0.691	0.230	0.588	0.489	0.180	0.582	1.468	
Var 34													
0.253	M	0.032	0.052	0.249	0.526	0.298	0.195	0.269	0.419	0.077	0.157	0.292	
0.326	SD	0.050	0.046	0.339	0.251	0.461	0.164	0.213	0.346	0.057	0.200	0.405	
Var 35													
0.548	M	0.103	0.103	0.566	1.615	0.337	0.380	0.467	1.205	0.125	0.225	0.417	
0.826	SD	0.096	0.070	0.739	1.041	0.444	0.353	0.406	1.431	0.103	0.268	0.404	

		Far West	U. of Arizona	Bank St.	U. of Oregon	Kansas	Hi/Scone	Florida	U. of Pitts.	RFC	Finish
Var 36											
0.574	M	0.661	0.447	1.002	0.432	0.284	0.499	0.294	0.472	0.338	0.406
0.716	SD	0.437	0.310	1.009	0.441	0.244	0.538	0.107	0.424	0.181	0.124
Var 37											
1.129	M	0.763	0.550	1.572	2.051	0.621	0.879	0.762	1.737	0.462	0.632
1.221	SD	0.455	0.360	1.619	1.352	0.667	0.798	0.448	1.694	0.203	0.324
Var 38											
0.513	M	0.206	0.125	0.814	0.295	0.121	0.586	0.119	0.327	2.768	0.152
0.995	SD	0.223	0.126	1.216	0.135	0.123	0.618	0.076	0.526	0.602	0.023
Var 39											
0.478	M	0.288	0.129	0.506	0.364	0.149	1.185	0.086	0.694	1.272	0.148
0.746	SD	0.193	0.099	0.632	0.170	0.154	1.390	0.044	0.911	0.418	0.182
Var 40											
4.287	M	0.926	1.619	8.904	1.755	2.894	5.301	1.066	2.535	5.106	0.813
7.867	SD	0.695	1.318	13.513	1.198	2.366	5.350	0.615	2.975	1.055	0.374

Var. 41.														
3.484	M	0.651	0.773	8.024	1.154	2.318	4.586	0.815	1.744	2.069	0.319	9.999		
7.234	SD	0.480	0.466	12.698	0.778	1.754	4.918	0.498	1.780	0.573	0.183	15.142		
Var. 42														
0.182	M	0.196	0.245	0.383	0.068	0.040	0.051	0.079	0.157	0.878	0.267	0.117		
0.253	SD	0.255	0.156	0.351	0.057	0.062	0.054	0.114	0.108	0.353	0.113	0.116		
Var. 43														
0.278	M	0.141	0.276	0.291	0.748	0.349	0.106	0.071	0.208	0.442	0.461	0.218		
0.238	SD	0.123	0.157	0.218	0.261	0.095	0.137	0.068	0.154	0.072	0.218	0.158		
Var. 44														
1.113	M	1.265	1.018	2.066	0.609	0.511	0.947	0.843	0.981	1.576	1.265	1.419		
0.827	SD	0.528	0.409	0.974	0.496	0.282	0.792	0.489	0.750	0.786	0.411	0.983		
Var. 45														
2.357	M	2.334	1.303	3.335	4.242	1.783	2.942	1.106	2.575	1.871	0.863	2.054		
1.953	SD	2.023	0.446	2.720	1.278	1.515	1.819	0.302	2.486	0.992	0.477	1.205		

Var 46													
1.249	M	0.536	0.552	0.310	2.137	2.615	1.014	0.506	0.999	3.884	0.595	1.355	
1.147	SD	0.206	0.369	0.375	0.889	1.111	0.703	0.248	0.554	0.967	0.189	0.870	
Var 47													
2.609	M	1.008	2.327	1.379	4.696	3.253	1.861	1.891	2.422	2.846	4.557	3.671	
1.809	SD	0.422	1.415	1.395	1.524	0.924	0.810	0.814	1.365	0.248	1.407	2.870	
Var 48													
0.294	M	0.070	0.052	0.317	1.089	0.038	0.185	0.199	0.786	0.048	0.068	0.125	
0.676	SD	0.066	0.057	0.466	1.161	0.060	0.340	0.225	1.243	0.058	0.075	0.101	
Var 49													
3.005	M	0.363	0.643	7.519	0.790	2.169	3.401	0.729	1.050	0.797	0.171	9.640	
6.965	SD	0.415	0.481	12.240	0.667	1.802	3.753	0.499	1.042	0.423	0.123	12.919	
Var 50													
0.119	M	0.043	0.197	0.004	0.069	0.143	0.025	0.0	0.059	1.576	0.0	0.0	
0.356	SD	0.071	0.211	0.014	0.117	0.233	0.032	0.0	0.115	0.658	0.0	0.0	

